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Ву

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WITH A FOREWORD

Ву

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SECOND EDITION REVISED



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THIS BOOK IS PRODUCED IN COMPLETE CONFORMITY WITH THE AUTHORIZED ECONOMY STANDARDS

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To MY WIFE

FOREWORD

I am very glad to respond to the request that I should write a foreword to Mr. Burns Morton's book *The New Foremanship*.

The relationship between Management and the Operative in Industry has gradually changed during the last twenty-five years, due primarily to the extension of large-scale undertakings and consequently the greater difficulty for higher management to keep in personal touch with the operatives. The link between the operative and the management has been and still is the foreman. The foreman can wield a tremendous influence in contributing to the success of any company. A slightly imperfect interpretation of any particular instruction may lead to serious misunderstanding and trouble.

It is almost traditional that the foreman in industry has been selected for his special skill in the craft on which his particular shop is employed. He was also selected for his ability to lead, control and organise, but in the past this qualification has often been regarded as subsidiary to special skill in the craft.

With modern developments it looks to me as though qualities of leadership and power of interpreting correctly and persuasively to the operatives will be possibly of far greater value than mere skill in the operation. At this stage we are in a state of flux, and whilst all the best brains in the country, not busily employed in winning the war, are being concentrated on the various aspects of post-war development and planning, the future at present is somewhat obscure. What is plain to me, however, is the fact that British Industry will need the closest sympathy and understanding right down the line if it is to take its proper place in the development of the post-war world. In this line a most important and essential link is the foreman, and the measure of his ability to face the new conditions may well be the measure of the success of industry.

I heartily welcome Mr. Burns Morton's book, to the preparation of which he has given a tremendous amount of thought. It is a book which should become a textbook, and undoubtedly will be most valuable and helpful to every class in industry.

GEORGE BEHARREIL

PREFACE TO SECOND EDITION

The second edition of this book is marked by the inclusion of Section VIII Bonuses for Foremen, Section IX The Status of Foremen, and Appendices C and D, Supervisors' Discussion Groups and A Foremen's Charter. These additions follow an investigation under the auspices of the Faculty of Commerce of the University of Birmingham and under the direction of Professor P. Sargant Florence, carried out by the author who records his appreciation of the facilities provided and the guidance given. Much appreciation is also due to the many companies who went to considerable trouble in providing details of their schemes and explanations of their working.

June 1944

F. J. BURNS MORTON

AUTHOR'S PREFACE

This book is primarily written for directors, managers, technicians, and those thinking foremen who believe in the possibilities of their job. It endeavours to propound and analyse the foremanship problem in the light of present circumstances and likely trends. Contending that foremanship must receive more intimate and interested understanding from management and that both the standard and the status of supervision must be raised, it is argued that, while this may to some extent be brought about by the efforts of the foremen themselves, the responsibility for the improvement must rest with the higher authorities in industry, and its impetus come from them. Educational institutions can do valuable work in the way of providing useful training, but the onus of indicating what is needful and essential is on the directors and managers in industry. The aim must be clear; there must be a definite plan to follow, and the method prescribed must find not only general acceptance, but general approbation.

Reform must arise within industry. Educational bodies can help and facilitate the drive, but industry itself must lead the way and set the pace.

Surrounding circumstances have changed, but foremanship has stood still, and the need for its review must be considered in the light of social changes, the improvement in working conditions within the factories, and the higher standard of professional management.

Both in Great Britain and in the United States of America, many text-books on the subject have been published, but these are addressed almost exclusively to foremen and would-be foremen. This is a step in the right direction, but improvement cannot approach to adequacy until facilities for development have been provided—and provided willingly—by the management. It is in the hope that this aspect will be considered with more sympathy, and that action will the sooner be taken, that this further book is imposed at the present time on already hard-pressed industrialists. If at times its aims may appear too idealistic, it will at least have done good work if it has induced the unconverted—there are many—to revise their opinions, and the adherents to consider the advisability of more rapid and more decided action.

AUTHOR'S PREFACE

Many acknowledgements are due: in Great Britain and the U.S.A. to many companies, and to other sources of information, who have permitted a description of better practice.

Appreciation is due to the Institute of Industrial Administration for permission to carry out, under its auspices, the investigation into Training Methods in Great Britain, and to members of its council for reviewing and amending the Report of the Survey; also to all those who either in part or in its entirety have read and made valuable comment on the manuscript, without accepting any responsibility for the views expressed: H. McFarland Davis, Dr. Alfred Plummer, J. B. Armstrong, Harry Ward, J. Foster Petree, C. P. Power, and Professor John Riegel.

Acknowledgement is also due to the Editors of Engineering for permission to reproduce, with some modification, articles already published on Incentives and on Training in the U.S.A. and in Great Britain.

F. J. BURNS MORTON

April 1943

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SECTION I

ORDER OUT OF CHAOS

1. Things Change

The problem of foremanship in modern industry requires and deserves the most urgent and detailed consideration. Generally, there is dissatisfaction with the low standard of supervision which is the cause of many difficulties that need never arise. Supervisory incompetence, although traceable to many immediate causes, is, in the last analysis, often the result of applying old methods in an attempt to solve new problems.

The foreman exercises a traditional function, which has been neglected and largely ignored, as though it were of no importance among the many changes which have taken place both within industry and without. Economic and social changes have been responsible for new methods of organisation and new personal relationships in industry. These changes, although fundamental and far-reaching, are of a gradual and evolutionary character rather than sudden and revolutionary. They have produced, in fact, two types of foreman, the new and the old, whose outlooks are diametrically opposed. The differences between the old and the new foreman are very real. Being so little recognised generally, these fully justify a clear distinction in the building up of a new theory of foremanship.

The foremanship function in industry varies greatly. Designation ranges from superintendent to supervisor, and from overseer to charge-hand. Duties range from purely technical detail to wholly executive matters. The scope of responsibilities varies from whole or part-control of hundreds of operatives on mass production to overlooking a few workers on highly skilled jobs. The department may be one of many in a large works or the main section of a small factory. The foreman's ability may be high and his status recognised, when he may be highly paid, or his ability and status may be low, when he may be poorly paid.

I. B

The old foremanship tends to emphasise the differences which exist in practice, and to conclude wrongly that each factory, each department, and each foreman is a subject for separate consideration.

The new foremanship, while recognising the differences in the technical and executive nature of the job, lays stress upon those identical processes of supervisory technique, and those similar methods employed in getting things done, which are universally to be observed as the best practice throughout industry. It is only incidental to the technique of supervision whether the manufacturing process is making matches or brewing beer, whether the foreman is a qualified engineer or an indifferent mechanic, whether he is termed superintendent or supervisor, or whether the staff consists of male or female operatives, skilled or unskilled. The new foremanship is concerned with production in quantity and quality; with work, workers, and place of work; with materials, machines, and methods; with proficiency of employees and efficiency of organisation; and with departmental improvement through cost reduction. It is concerned, too, with the new significance of the foreman's job, and it stresses the importance of those aspects of teamwork and development which are so often overlooked. The reorientation of the foreman's duties, with its greater emphasis on securing results through persuasive influence over employees, calls for new methods and new abilities. Whether the introduction of the new foremanship implies the appointment of new foremen must depend on the circumstances surrounding existing supervisors and whether these supervisors are sufficiently adaptable to changing conditions and new requirements.

Modern management is moved by certain fundamental ideas: that the quality of man-power is the most vital factor in success; that there is a growing dependence on initiative as distinct from mere 'obedience; that the raising of morale is preferred to the imposing of discipline; that development is essential to the guarantee of permanent profits; that training based on careful selection of suitable men must become a conscious and continuous process; that proficiency is not dependent alone on skill, but on the use made of available energy and latent ability; and that potential qualities are drawn out under favourable working conditions, and by proper direction, guidance, and stimulation exercised by those supervising.

Progress in the adoption of modern methods of management

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has far outstripped the capacity of foremen to assimilate and put into action, without help and guidance, those changes in technique necessary not only to cope with changing conditions, but to build up in detail an organisation suitable for the future.

The new foremanship in industry must follow inevitably the recognition and adoption of better British business methods with improved standards of management. Impetus for improvement must come from the top of the industrial hierarchy, but better management cannot be fully effective unless it is fully supported by satisfactory supervision. Improved methods can only be successful if those in control take full advantage of them. An efficient manager cannot reasonably expect improved methods to be adopted and used to full advantage by poorly trained and unsuitable supervisory staff. The realisation that the foreman stands like an obstacle in the path of progress has often resulted in the wider recognition of, and the growing demand for, the new foremanship. Then, too, the uneconomic control of processes and the unsatisfactory influence of foremen over industrial relations have also given rise to a need for immediate and drastic changes in the existing standards of supervision.

The old foreman was brought up in the hard practical school of manual work. He was appointed to his supervisory position usually after years of waiting, either on the basis of skilled craftsmanship or of long service, or for some other reason. Without formal trainingand with repeated correction of recurrent errors for his only guid, ance, and imitation his only instructor, he evolved for himself, after years of experience, some possibly adequate, but still rough-andready, rules of thumb. In the circumstances, it was natural for him to be a law unto himself. He was, in fact, the boss of his department, with the power to indulge his whims and fancies, and to hire and fire at will, if so minded. His forcefulness could, and did, achieve results, but too often there was a tendency to aggressiveness, and even bullying was not unknown.

Having fought hard for his position, the old foreman was no believer in rapid promotion or in paving the way for his sub-ordinates. There were, naturally, many exceptions, but, in the main, the old type of foreman neither planned, nor delegated authority, nor trained understudies, and discipline in his department was often secured largely by threats of dismissal. Not infrequently he was overworked, often simply because of poor organisation, for

he was seldom given definite policies, plans, or programmes to follow. He had no reliable records, no measurement of individual performance, no established standards of quality, no provisions for incentives, and there were few facilities for teaching and training. This last factor, perhaps more than any other, may have been at the root of his somewhat dogmatic and very conservative attitude.

The new foreman, in contradistinction, has frequently had a good general education and in many cases some sound technical instruction. Being younger and finding promotion quicker, he is likely to be less prejudiced and more adaptable to changing circumstances than the older type of foreman, and with a basis of some formal training to build on, he is impatient of inaccurate and approximate methods. He prefers measurement to rule-ofthumb practices. He frankly and open-mindedly regards data as for common use, to provide those facts on which decisions are taken. Where changes of procedure have been proposed, the new foreman habitually investigates and consults as a preliminary to action. When new systems of operation are devised, he adheres to those established principles of simplification, standardisation, and specialisation in the organisation of work and workers. He concerns himself with improvement based on known and recorded facts as to output, quality, and costs. Specialists in various aspects of operation are available to advise, guide, and direct him, so that there grows up an interdependence which relies on co-operation and collaboration. With the advice of available specialists to rely on, the new foreman now tends to assume more the functions of a manager who gets results by directing the efforts of others. Supervision is so greatly simplified that he can concentrate on his main task of output by directing his subordinate working force economically. He can now concentrate on two simple issues organising work and managing operatives. In making departmental output his chief concern, he endeavours to avoid friction, and aims at smooth working and high personal performance through encouragement and proper reward. Discipline is not considered a thing all-important in itself, but a means to an end, calling for the exercise of just sufficient compulsion to produce the best results. The foreman is thus tactful and considerate in the supervision of operatives, and orderly and progressive in the organisation of maximum output.

These types of foremen, described as the old and the new, are

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the extremities on a scale of competence along which are to be found at different points the relative positions of all foremen. Attempts are frequently made to explain a complicated problem simply by the description of two extreme types, as in extravert and introvert psychology; but although the exceptionally poor or outstandingly good are rarely to be found—since redeeming features and occasional shortcomings mark most men—these descriptions serve to emphasise that the new foremanship is not only a new technique of operation but a new outlook in supervision. Output is being obtained in every working factory all over the world, but it is not a question of what is done, but how it is done, and why it is done; not so much what is said, but how it is said, and why it is said. It is for this reason that foremanship can be considered generally, quite apart from the industry or trade, office or workshop concerned. The function of foremanship omits reference to trade technicalities, whether building bridges or baking buns, but is concerned with those supervisory duties which affect executive work generally, irrespective of designation.

2. Economic and Social Changes

The changes which have affected foremanship are fundamental and far-reaching for they are both economic and social; the former resolving themselves into new methods of organisation, and the latter into new relationships between man and man on the factory floor.

Economic changes have been brought about largely by competitive conditions with their attendant demands for progressively lower prices, which in turn have been responsible for what is commonly regarded as mass production. This has accounted for the larger and still larger production of similar articles, which naturally implies greater size and complexity of organisation. Coupled with this are the increased speed of operation and the need for a planned, controlled, and co-ordinated organisation.

As companies increase in size and are compelled by competition to reduce their prices and the margin of profit on each article manufactured, it is vitally necessary to their existence that there be a smooth orderly flow of production. There is no room for rough-and-ready methods and individual whims and fancies; and personal uncertainties must be eliminated. Interruptions, whether caused by materials, machinery, or men, must come to

an end. Planning is indispensable in forestalling emergencies before they arise. Odd jobs and intermittent operations must be reduced to a minimum and dealt with separately from the routine arranged for mass production. Large-scale manufacture has brought with it the need for interchangeability and all that it implies in standardisation of quality. Mass production is accompanied by the utmost attention to the simplification of processes. The full economy of continuous repetition is only possible when all unnecessary movements have been eliminated. Then, too, large-scale repetition calls for specialisation of plant and equipment designed to fulfil special purposes. Modern mass production has been accomplished by breaking down long-cycle processes to permit the full exploitation of the division of labour, so that inexperienced manual operatives may be trained quickly to a high degree of skill on a relatively small range of similar processes.

In pursuing the policy of separating the distinctive features of production, one of the most fundamental changes has been to divide planning from performance. This policy has had the effect of creating a number of functional specialists concerned with preparing and pre-planning for performance, and with recording and controlling the results of production. These functions have been embodied in such departments as Purchasing, Planning, Progressing, Personnel, Time Study, and Costing and Statistical Control, which all assist and advise the foreman in the supervision of the actual execution of operations. Wage payment, by time or by results, has also been recognised as requiring the attention of a specialist, so that wages may bear a direct relation to the work done without constant adjustment, and thereby preserve the inducement of incentive. With all these attempts at analysing and controlling production through specialists, it is clear that ultimate economy can only result when machinery exists for co-ordinating the numerous parts which go to make up a large organisation.

It is to be observed that all these changes which affect the workshop are concerned with organisation rather than with inventions and new process discoveries. At the same time, industrial and scientific research, as well as new designs in machinery, have played an important part in facilitating mass production. In recent years, industry has not been greatly influenced by the discoveries of pure science except where such discoveries are directed by economic requirements; but it has derived considerable benefit

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from research directed under the incessant demands of mass production for new devices of manufacture to give greater, better, and cheaper output.

Social changes in the last quarter of a century have been no less revolutionary than those economic changes which have been responsible for mass production. The impetus towards social understanding has been more widely accepted and better appreciated than ever before: These trends in human relationships generally, already well established, have received a tremendous momentum from a war between the fundamentally opposed views of autocracy and democracy; between the old and the new methods of control. It is clear that the future of any undertaking will depend on the capacity of its management to catch, and adapt itself to, the new spirit of the age. In days gone by, with abundant labour reserves, results on which industry depends could be achieved through a discipline depending on fear of dismissal. But to-day, with scarcity of labour prevailing, a new technique of discipline is necessary. Whereas formerly the employer bought labour, he now sells employment. The worker has rights, privileges, and representatives, and these have gone far towards equalising his bargaining power. Although the employee is not entirely independent, he has now a much greater degree of independence, and he does not hesitate to exercise it. With the wider understanding of industrial problems is developing the recognition of mutual interdependence. Previously it was necessary to devise measures to make men work, whereas it is now essential to find means to enlist their willingness to work. Whereas the daily task was once considered necessarily irksome, it is now to be regarded as a not unpleasant occupation. Aggression has given place to persuasion; and domination has been superseded by co-operation.

There is nothing inconsistent in the retention of the present hierarchy of authority with a coincident use of the new technique of discipline—it is, in fact, absolutely essential if competitive industry is to survive. It is useless to deny that workers are more independent, that they are better and indeed ably represented, and that they exercise immense influence on events. The sensible thing is to face these facts and induce willingness to work under approved conditions. To understand the relations between individuals in industry, to improve conditions in order to get the best results, and to devise new techniques of discipline with a view to

more exacting control and development, is not an idealistic aspiration but practical politics, and is to be regarded as the modern method of management.

It is by first accepting as inevitable this trend of events and the need for new democratic methods that group integration is to be recognised as the basis of present and future industrial organisation. Management, which carries the responsibility for accomplishing results through the efforts of other people, is concerned not only with the direction of things but with the development of people. After all, workshop organisation is a flesh-and-blood affair in which results, although visibly dependent on materials and machines, cannot be accomplished except by man-power. The relationships between man and man are of first-rate importance, for there is all the difference in the world between co-operation and opposition, between harmony and friction. Ultimate success in any organisation, whether industrial or workshop, depends on the proficiency of its people and the way they apply that ability. While individual competence and capacity, both in foreman and workman, are the foundations of industrial efficiency, real success, at root, depends on individual willingness to work, ability to organise, capacity for direction, and the degree of teamwork achieved. Whether these conceptions of industrial relations are regarded as the new leadership or the new methods of group integration is immaterial; the fact is that fresh aims have been established to deal with the new situation socially.

Human relationships in the workshop have been given an easily understood mechanistic interpretation. First of all, it is to be recognised that the whole is greater than the sum of its parts, for the cumulative effect of the efforts of a body of men in a workshop is more than the sum total of each individual's separate effort. Knowingly or not, each man influences the other men in the group for good or for ill. Men in contact with each other make situations better or worse according to their influence and temperament. A state of interaction is constantly going on. Consequently, group efficiency is either raised or lowered by the way in which the men react. When the atmosphere is favourable there is constant striving for improvement, both individually and collectively; each man wants to work effectively with others; there is a desire for order and efficiency; suggestions are made and considered; and a general feeling of helpfulness and willing-

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ness prevails. When morale is low, teamwork is poor; friction between men is a common menace; dislike for changes exists; and a tendency to hinder and hamper is a frequent condition.

The two extremities of group integration have been described to indicate the scale along which is to be found the general working conditions existing in each factory workshop. While it is not the intention at this stage to indicate the practical steps to be taken to effect improvements in workshop relationships, it is important to set down the general aims and conditions for its accomplishment:

- (a) It is necessary to recognise and establish by mutual consent that the whole is more important than any individual, and that a common aim which is the company's policy comes before consideration for any single person or group of persons;
- (b) There must prevail a common determination to build up workshop efficiency rather than to break it down, and this responsibility rests primarily with the foreman;
- (c) It is desirable that the foreman be accepted as the leader of the group, who demonstrates by example the way others are to follow;
- (d) Discipline must be maintained and justice administered, not only fairly but so that others recognise it to be fair;
- (e) Incentives, both financial and non-financial, should exist to encourage willingness to work;
- (f) Instructions, explanations, and training must be available to improve technique of operation;
- (g) A sense of sincerity, consistency, certainty, and security must exist, for men cannot do good work if they are worried by fear of dismissal;
- (h) If a common responsibility for results is to be established, it is preferable that each individual is allowed to enter into the success of the group;
- (i) There should be logical procedure and orderliness in the workshop so that each person, his duties, and responsibilities are individually identified and clearly prescribed in order that friction through misunderstanding may be avoided;
- (j) Co-operation and teamwork should be both the spirit and method of operation.

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Man-to-man relationships in the workshop are clearly emphasised so that each individual, while working in the group for the common good on which personal satisfaction ultimately depends, enjoys scope for self-expression, initiative, and competition, restrained only within the limits prescribed by the interests of the group as a whole. Integration, if it is to be successful, must be brought about by full appreciation of all the facts, and recognition that real differences and real identities of interest exist, so that while the former is frankly admitted, it is from encouragement of the latter that progress is to be made.

Before proceeding further, it may be necessary to point out that the adoption and exercise of a more modern method of control does not look for a complete reversal, or even a substantial change, in human nature. On the contrary, it expects only improved individual attitude through better working atmosphere, evolving from the trend of the times, and, admitting the need to work with rather than against established tendencies, it sees the need for "cashing in" on those changes in social and industrial relationships which are inevitable. To contend that human nature cannot be influenced, that you cannot teach an old dog new tricks, that the foreman must necessarily be feared and disliked by his staff, that men must be made to work, and that discipline must be stern and rigid, is completely to misunderstand the character of the social forces so obviously in full spate.

3. Changes in Business

The foremost directors of modern business fully appreciate that "the old order changeth, yielding to new"; they realise that new aims must be set forth and new methods introduced in order to give a wider interpretation to the purpose of industry and the distribution of its benefits. The narrow outlook on profits is rapidly falling into the background in favour of service to the customer or service to the community. No longer do directors refer to shareholders as the body which pays wages, but emphasise that it is the customer who pays wages and is ultimately responsible for the success or failure of the concern. This change in viewpoint, which can be put over to every person in an organisation, is clearly demonstrated by Henry Ford, who insists that machine tools are not devices for labour-saving but for labour-serving: emphasis is placed on high wages, more output, lower prices, and more

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leisure, rather than on fewer hours of work due to underemployment.

Developing the theme that the purpose of industry is service to the customer, a four-point policy has been evolved based on profit, permanence, proficiency, and progress. Each of these four points of policy is obviously essential to the life of the concern. Profit, in a reasonable degree, is essential to pay interest on investments, to provide for new plant, and to provide for future eventualities. Permanence is an essential feature in any established business, for it has to maintain itself in perpetuity, to provide regular and continuous employment for its staff and operatives, and to permit planning ahead in the common interest. Proficiency is obviously necessary to ensure both profits and permanence, to enable competition to be met, and to give service to the customer. Progress is the stimulant which keeps the concern alive and developing, and at full grips with the constant endeavour to give the customer good service. By making this four-point policy known to its employees, the board of directors clearly demonstrates itself as a sort of public trusteeship, where it must hold the balance and further the interests of each of the four main forces on which it is dependent—the employees, the shareholders, the customers, and the community.

Certain points have now been made clear. First, fundamental changes have taken place in the general economic sphere, which have been responsible for those complicated methods of organisation referred to collectively as mass or flow production. Second, substantial social changes have resulted in the need for, and development of, the modern progressive method more intimately described as group integration. Third, boards of directors have recognised these economic and social changes as they affect the administration of industry by broadening the general interpretation of policies, and by taking their staff into their confidence regarding them. It is to be recognised further that whereas at one time administration concentrated almost exclusively on the material and machine factors in production, these have receded somewhat in significance in recent years, and are subordinated to considerations of methods and personnel factors which have assumed a greater importance. All these changes have emphasised the need for a new administration of industry by professionally minded and highly qualified men who can not only face the facts of the changing situation, but who can

adapt themselves to a new outlook on industrial processes, and find methods for bringing their subordinates into line.

4. The New Outlook

Human relationships in industry range from the extreme of intense personal influence exercised by the proprietor over employees in the small family business, to the other extreme of impartial administration common in Government departments and large corporations. Although the danger of ineffectiveness is apparent in both extremes, the one having too much flesh-and-blood and the other being all skeleton, there lies between a desirable state towards which modern administration is striving. The economic and social changes which have taken place are responsible for an improved business outlook from one of competitive and predatory self-interest to one of productive social service.

The new outlook in foremanship, then, is an attempt to conduct workshop operation dispassionately according to the merits of the issues involved; there is an onus on the foreman to be impartial. An attempt is made, as far as possible, to deal with problems concerning methods of organisation and management of men on basic principles in the same way as technical problems of process are treated. In the first place, considerable emphasis is placed on investigation as opposed to impulsive action. Logical and impartial solution of problems depends on the availability of reliable information, and this frequently implies searching for facts. Forethought as a preliminary to action is a characteristic feature of the new outlook. It prevents hasty decisions; it engenders accuracy through measurement; and it permits balance and consistency to be observed. Jobs and persons can be weighed in proper perspective. Staff can be selected and placed impartially according to suitability. Training becomes recognised as an inevitable preliminary to efficient performance.

In this new outlook on workshop organisation, planning ahead is an unavoidable necessity for an orderly smooth-running programme. It is by foreseeing dangers and difficulties before they arise rather than by finding them afterwards that the new foreman is characterised. Good planning is the foundation of continuity in operation, regularity in employment, and confidence in the foreman. Industry insists on the elimination of elements of surprise. The aim is for consistent and constitutional procedure

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which allows for the full display of individual initiative without incurring intense and uncontrolled aggressiveness. The new outlook in foremanship might be described as a logical approach to the production and personnel problems in the factory. It is an attempt first, to find new facts by giving greater attention to every detail, and then, when all the information is available, to make decisions impartially and to take action impersonally. For this procedure to have real significance to the foreman it is necessary that he is fully aware of his responsibilities and of the methods for carrying them out, for the new means cannot be divorced from the new ends in the attempt to bring order out of chaos.

When events move as rapidly as they have done in the last generation, and when changes so vital and fundamental are constantly taking place, both the old foreman and the new, the experienced and the inexperienced, finds himself adrift among imponderables. It is clearly necessary that the foreman should appreciate the significance of the social and economic changes and their bearing on his responsibilities, and, as a result of this, the purpose of the new foremanship should be conveyed clearly so that it may act as an aim towards which he should strive. But it is also essential that broad, general issues should be accompanied by a description of more detailed technique to guide day-to-day action. For even if the foreman is able to appreciate the present general trend of events and the meaning of the fundamental issues underlying, he cannot improvise a new technique of supervision without guidance. This must come from a management aware that old methods are inappropriate to the present times, where final results are determined not only by the things done, but by the way they are done. As the policies and practices of the past have been responsible for present problems, so will the decisions of to-day determine or obviate the difficulties of to-morrow. Instruction in industry, unlike some educational exercises, must be decided by future requirements, not following slavishly the traditions of a bad past history, for it is the sine qua non of business that those who would prosper continuously must base their activities on sound fundamental principles; they must be aware of changing conditions; they must not only be up to date, but looking ahead; they must foresee future trends so that they can prepare for them and take full advantage of them.

The outlook of the new foremanship in industry signifies the

determination to help rather than to hinder; it wants to prevent rather than to cure; to insist on order instead of permitting muddle; to be precise and not to be vague; to exercise judgment impartially and not to act with prejudice; to hold the balance and to avoid inconsistency; to be fair and not to favour; to be considerate yet firm; to employ without abuse the privileges of authority; to explain instructions rather than to issue orders; to speak simply and directly and to avoid the involved and roundabout; to accept and also to inspire the acceptance of common responsibility; to enlighten and to encourage subordinates; to stimulate willingness to work and desire for improvement; to work towards a common aim for the common good where the job comes first and where the whole is greater than any of its parts; and thus to establish teamwork and to justify supervisory leadership.

SECTION II

THE NEW FOREMANSHIP

5. Getting Things Done

The foreman's job is to get things done. His value lies in his ability to obtain results. His function is not to do the work himself, but to get others to do it. Success is not accidental; it comes from the employment of suitable methods. It is the methods that the foreman employs which distinguish the old from the new foremanship.

Profit alone is not necessarily an indication of successful supervision, for economic factors far beyond the control of the foreman determine demand and price, on which profit largely depends. The department supervised may be only one of many; its contribution to profits may be improved, rectified, or whittled away by other departments, by management, or by the policy of the directors. The efficiency and effectiveness of supervision must be related to those factors within the workshop and those immediately in contact with it. Then, too, while a foreman may get results by the continuous hiring and firing of men, this policy is possible only under conditions of ample labour supply; it falls down completely when scarcity prevails. The workshop is full of kindred issues, each either adding to, or taking away from, the final result, which in fact is the sum total of many pluses and minuses. It is important therefore to recognise that workshop supervision is not primarily related to company profits, and can be satisfactorily related to workshop potentialities only.

Momentum also plays a large part in management, for it explains why so many factories with poor directors, managers, or supervisors, are able to carry on. In such cases, the ball has been set rolling in the right direction and in spite of every internal impediment, momentum carries it forward for a time. Another reason for the continued existence of inefficient enterprises is that competitors are neither strong enough nor are their products good enough to force them off the market. In this connection it will be recalled that one of the main arguments against the extension of monopolies is the continuity of wasteful methods through the

absence of competition. Sufficient has been said to explain why inefficiencies due to lack of planning, control, and co-operation, attributed to the old foremanship, still continue to exist.

Before proceeding to describe the new methods which constitute the new foremanship, it is necessary to indicate the effect on the foreman's job of recent general changes in the economic and social sphere, and the significance of new methods of organisation set up in consequence of these. The realisation of the economies of mass production was mainly responsible for the growth of large-scale concerns. The military form of organisation, previously dominant, where each man had one boss, where each foreman held complete control of the activities in his workshop without interference, was found to be unsuited to the control of departments larger in size and more complicated than the entire activities of small companies.

Some forty years ago, Taylor, as the result of his experience as a machine-shop foreman, pointed out the growing number of duties, the immense responsibilities placed on workshop supervision, and the hopelessness of ever finding men to undertake the work at the wage and under the conditions usually offered. It was, in fact, the wide range of duties of the foreman that prevented any improvement in operation being made, because he was so occupied with routine matters that there was no time for anything else. Taylor found the position of the foreman one of his chief difficulties in modernising the workshop in accordance with the requirements of large-scale organisation. As conditions changed, as concerns grew larger, and as modern management became more widespread, it was generally recognised that the existing standards of foremanship did not permit the rapid development demanded. The foreman became the greatest obstacle to expansion, and as he was not adaptable, his job was adapted to him by curtailment. Taylor started what is now common practice when he introduced functional specialists responsible for the application of the new techniques of time study, planning, progressing, personnel, quality control, and costing. As the advantages of each of these newer techniques became apparent, they were hurriedly introduced, more often than not with an inconsiderate determination which left the foreman no other alternative but to like it or lump it. Full control of the workshop passed from the foreman, for he was no longer the undisputed boss. All too frequently

these specialists rode rough-shod over his authority, leaving him with skeleton-like duties, undefined responsibilities, and uncertain authority.

Although control by systems produced temporarily beneficial results, the employees took unkindly to the new methods which gave them countless orders and many bosses who frequently conflicted with each other. After many serious labour disputes, and when the new systems had settled down along more constitutional lines. the function of foremanship reasserted itself. The importance of the foreman in supervising the operation of systems on the job, and his great influence in industrial relations through day-to-day contacts, became more prominently recognised. As with so many innovations, the pendulum swung, as it were, too far in favour of the specialists and their systems, and now it is returning to the more normal and balanced position where the full advantages of economies through systems can operate side by side with the full benefits to be gained through the unbiased personal influence of the foreman in day-to-day contacts. This reorientation has been brought about by a better general understanding of the principles of organisation, so that the function, duties, responsibilities, and authorities of the staff specialists and of the executive foremen can be clearly set down so as to avoid overlapping or confusion, and this helps to prevent friction and negligence arising.

While the management and functional specialists may understand the relation and significance of their various duties, this in many cases has not been made clear to the foreman, and there is a danger that he is again to be overlooked. When the importance of the foremanship function has been more widely accepted and is better understood as part of the scheme for getting things done, it will be realised that the foreman is far too vaguely, if at all, aware of the technique and purpose of the work carried out by specialists. Only in comparatively few cases has any attempt been made to give him formal instruction, or to acquaint him with techniques which he does not understand but which, when understood, can be used to solve the problems with which he is daily confronted.

It has been shown already that while changes in workshop organisation have taken place, the causes of these changes are fundamental in the economic and social trend of events. The changes in workshop organisation are merely outward manifestations of adjustments required by the temper of the times. The

foreman must not only learn new methods, but also their new meanings. It is more than a mere body of systems and devices, or even rules and regulations, which is wanted. A new outlook must be created which enables current problems to be approached from the new angle. The new attitude of mind is the embodiment of certain accepted principles, the proper application of which produces solutions in accordance with requirements. It is obvious, therefore, that the methods of getting things done in the new foremanship are diametrically opposed to the methods previously accepted, for these differences are fundamental and can only be expressed conveniently in a new attitude of mind.

Let it not be thought that a change from the old to the new can be brought about overnight. The purpose of drawing attention to the fundamental nature of the change in attitude is to insist that improvement be made progressively and logically. The new foremanship embodies an immense technique, involving fundamental principles, and sound judgment can only be expressed when the whole is fully understood, and when the application and limitation of principles is properly appreciated. Workshop supervision must always be conducted with the utmost common sense, with balanced perspective, and with great consideration of detail, so that methods adopted will be practical and appropriate to the situation prevailing.

The new foremanship, in the exercise of its executive capacity to get things done in the factory, has been distinguished by general aims and outlook, methods of approach, and the measure of results obtained. Getting things done depends first on the influence exercised by the management; secondly, on a sound sense of organisation; and thirdly, on the methods employed. These three factors, now to be more closely examined, are finally brought into practical use and produce definite results through the foreman, who must be suitable in type and satisfactory in ability; who must be methodical and well balanced; and who must be possessed of clear understanding so that general principles and practical details stand in proper perspective.

6. Management's Responsibility for Foremanship

While the job to be done should be the first consideration in any organisation, it must be appreciated that the degree of efficiency with which the job is accomplished depends on the man appointed:

to do it, on his ability, on his willingness to apply that ability, and on the quality of direction and guidance given by his superior. As the responsibility for good management rests with the directors, so the responsibility for good foremanship rests with the managers. Whether better supervision can be accomplished by existing foremen depends first on agreement and acceptance of those factors which constitute good foremanship, and then on the adaptability of each individual. Successful supervision depends primarily on the person supervising and it is for the management to see that suitable men (or women) are appointed to the job.

It is, of course, an obvious preliminary requirement that before better organisation and improved industrial relations can be effected in the workshop, a good sense of organisation and understanding should exist between the management and the foreman. Improvements in supervision cannot be expected beyond the degree permitted by the management. The foreman must have from his superior that guidance by example which will enable him to strive effectively in the right direction. After all, if the foreman is unfairly blamed, if he is criticised in front of his subordinates, if he is never commended, if his job is insecure and he is dissatisfied, it will not be surprising if the employees in his department are treated likewise by him. Similarly, if instructions to the foreman are neither clear nor consistent, these conditions will be transmitted, and the responsibility for improvement in this direction must come from above and not from below.

It is no part of the present discussion to intimate or estimate how far the present unsatisfactory state of affairs in industry is to be attributed to poor management, incompetent foremanship, or antiquated policies. The purpose is to show the lines along which improvement can be made in building up, rather than in breaking down, industrial efficiency, by the removal of hostile elements and internal friction. First, it must be established that the management is chiefly responsible for the character of internal relations, the effectiveness of the subordinate staff, the suitability of existing systems, and the overall efficiency attained, because in management resides the power and privilege of removal and replacement. Secondly, it must be accepted that management must lead by example, for where there is no collaboration between managers and foremen it is not to be expected that co-operation will be strongly evident in the workshop.

Already it has been shown that highly individual and autocratic leadership, often expressed through an abuse of privileges, is completely unsuited to the temper of the times. Management to-day must be prepared to investigate problems, appreciate difficulties, discuss solutions, and guide subordinates. Management must, in fact, teach and train the foreman if it expects him to develop the operatives under him. But responsibility is no longer to be regarded as the concern of the management only; it must be delegated and shared. Then, too, responsibility for results implies the requisite degree of authority required for accomplishment. The foreman is part of the management: he must lead as he has been led; he must teach as he has been trained; he must obtain co-operation as he has himself been induced to collaborate; he must treat his subordinates as he has been treated by his superiors; and he must stimulate as he himself has been encouraged.

How obvious and how little adopted in practice are these propositions is one of the outstanding inconsistencies which the innovation of the new foremanship would tend to remove. The highly individual competitiveness encouraged under the general economic policies of laissez faire is changing to one of initiative within a framework of collective effort. The personal interests of individuals must be constrained so as not to interfere with the well-being of the whole. With the new foremanship, interest is directed to departmental efficiency and away from personal aggrandisement. The foreman is thus to be regarded as part of the management, sharing in the common responsibility with his superior officers and with other foremen. To mark this change, his status must be improved. The foreman as part of the management is the manager of his own department. His department is a business within a business, and he controls it. This he must accomplish with credit to himself and with satisfaction to his employers. When departmental supervision is viewed from this angle, the services rendered by the functional specialists take on a new meaning; they help him to improve efficiency through planning, time study, costing, personnel, and the like. Then, too, departments do not become watertight compartments each concerned entirely with its own affairs, but part of a mechanism, or body politic, where each department is interdependent in relation to the common good.

Once the management have welded the foremen into a collec-

tive body where unity prevails, the formation, discussion, and application of policy can be effected through consultation and collaboration. Foremen taken into the confidence of the company before rather than after changes have been made, are naturally more likely to have the right regard for their common responsibilities. Men taking part in discussions are inclined to regard decisions as of their own making. When new policies are explained and difficulties dealt with before action is taken, criticism of the management dies and confidence rises; comprehension replaces misunderstanding; and agreement prevails over friction. Quite apart from the advantages in the uniform application of fully discussed policies, the operative has confidence in the cohesion at the top, which is impossible where confusion and disagreement are prevalent.

In this way the higher management achieves through collaboration and by explanation a well-knit executive, which is constructive in criticism, which gains co-operation within and confidence from without, which is informed in policy, and which achieves uniformity in the application of that policy. Leadership must come from the top; the executive body must be an example to workshop operatives. As the foreman must follow the lead of his superior, so the operative must follow the foreman.

It is not provision for periodic conferences only which is required, but the principle of collaboration that needs to be established; not just general and infrequent discussion, but detailed considerations in day-to-day contacts. It is the genuine, consistent, and deliberate adoption of the policy of collaboration rather than a fickle, casual, and reluctant regard for an admittedly desirable routine which is wanted. The machinery for collaboration is very simple, ranging from day-to-day contacts in the workshop to regular conferences, providing throughout for the dissemination of instructions in a clear, precise, and explanatory manner, and preferably given in writing.

The new foremanship seeks to overcome by new methods those inherent weaknesses common in the old foremanship. As a first condition of improvement, there must be a greater measure of mutual understanding throughout the concern, particularly between the management and the foreman. The second general condition essential is the recognition and adoption of a sense of organisation, and this implies a knowledge of that immense tech-

nique of supervision which has grown up in the past few years and involves new policies and new practice. From this, it is possible to consider briefly and in detail the ten-point programme which sets out the characteristic features of the new foremanship under the headings: Investigation; Planning Ahead; Operation Efficiency; Selection and Placement; Training; Giving Orders; Incentives; Control; Teamwork; and Development.

7. Sense of Organisation

As companies expand, improvement in organisation is imperative. While it is possible for a man with a few subordinates to achieve success in business by personal drive and energy, this alone is insufficient in larger concerns. Trial and error methods common in the small business have much more serious effect in a larger one. Sound organisation is based on a high degree of detail. Communication, which is a comparatively simple affair where the manager is in a position to direct and supervise every detail, is a complex problem in a widespread and complicated concern. The separation of duties and the delegation of authority must be carefully arranged if direction from the top is to be preserved throughout. The time factor plays an important part, for it is necessary not only to establish stability by the elimination of elements of surprise, but to ensure at the same time that degree of flexibility necessary for immediate accommodation to internal and external changes. Both in the extension and in the operation of a business it is necessary to preserve balance in organisation and uniformity in development. Progress must be controlled and operation efficiency ensured by planning. Order must prevail throughout. There must be a place for everything, and everything in its place.

The purpose of sound organisation is to ensure progress through efficient operation by establishing and stabilising routine as far as possible, so that smooth running can be achieved by constitutional and consistent methods. With a view both to continuity in operation and economy in separate decisions, rules and regulations are drawn up to guide current practice, and, once established, it is expected that these will be followed. Once responsibilities have been accurately assigned and clearly stated, and authority has been correctly delegated, these decisions should be respected with but few exceptions, and these in rare circumstances. If the structural

authority, delegated responsibility, and separated duties have been competently planned and accurately arranged, then routine should function best when these established channels are followed. The sense of organisation, so necessary in building up a sound executive and a strong foremanship, implies the capacity to set up routine and to adhere to it. Consistency in policy can only be assured by constitutional methods. Breaking rules and regulations, cutting across authority, short-circuiting instructions, although essential in justifiable emergencies, destroy the advantage of organisation if made a common practice. More often than not this antithesis of organisation is most commonly found in managements who set up routines with good intentions and immediately break them on the slightest provocation, as if to show their power by the abuse of their privilege. Muddle of this sort is frequently to be attributed to the heritage of the small business. To adhere to established routine for communicating orders and at the same time permit prompt action calls for a strong capacity for organisation.

The sense of organisation, which is an essential prerequisite to the development of the new foremanship, involves the ability to set up, and the determination to adhere to, the mechanism necessary to do a certain piece of work. Organisation is clearly dependent on the work to be done, and as this changes with circumstances, so the machinery must be overhauled, modified, or removed when redundant. But, apart from improvements in operation, once the machinery has been set up it should continue to function effectively as arranged. Modern organisation implies the continuous consideration and pursuit of detail so as to take the fullest possible advantage of the principles of mass production. There is concentration on the continuity and regularity of similar operations, which are separated from those unavoidable and intermittent processes which are reduced to a minimum. Planning is separated from performance; operation is separated from output measurement. Processes when simplified to the limit are standardised. The utmost advantage is taken of specialisation of machinery, materials, methods, and men. To appreciate to the full the application of these methods, to prepare for routine operation after full consideration of all details, to foresee and forecast for future eventualities, and to carry out, and to insist on others carrying out, the orderly and methodical routine laid down, is to establish that sense of organisation so essential to executive effectiveness.

whether in management or in foremanship. Organisation, which means order as distinct from muddle, is the primary and continuous concern of the new foremanship in making progress by preserving perspective between the whole and the part, between the work and the worker, and by achieving efficiency through smooth, economical, and logical flow in processes, after making due allowance for human errors and limitations.

Instead of regarding business organisation as consisting of purchasing, production, personnel, accounts, and so forth—a somewhat obviously convenient departmental division—attention is now being devoted more to the functional aspects residing in Direction and Control; Investigation and Development; Selection and Training; Incentives and Teamwork—features generally applicable in all departments. As distinct from the practice of the past to concentrate on systems and devices with limited application, the tendency to-day is to train supervisors in the fundamental policies and principles of executive work so that application is largely to be left to individual initiative and ingenuity. By emphasising policies and plans through their practical demonstration, the intention is to substitute intelligent adaptability for blind imitation, to insist on men thinking for themselves rather than to rely entirely on instructions. What is required is a developed and disciplined mental attitude which can approach day-to-day problems logically and sensibly, which can distinguish between temporary expedients and permanent policies, and which above all can relate and regulate details to the main purpose of proficient production.

8. Investigation

The first outstanding feature of the new foremanship is determination to find and to face the facts. Whether it concerns breakdowns in system, or complaints from customers or workers, the first reaction is to get to the bottom of the trouble, gathering all relevant information quickly and logically. Causes of breakdowns, whether in plant or in process, can be pursued, found, and corrected most rapidly by collecting all the available data, separating cause from effect, distinguishing fundamental from trivial, and dividing general from detailed issues. An engineer, in tracing and curing a fault in a motor-car, pursues dispassionately the logical line of reasoning in moving from the known checked facts to the unknown and unchecked faults. Where necessary, special tools

and equipment must be made, and in some cases information can only be found accurately by introducing some means of measurement. Yet in industrial processes, and perhaps more particularly in non-engineering trades not necessarily accompanied by any formal scientific training, there is a tendency to jump to conclusions, and to see solutions before the problem has been set. If difficulties can be overcome, however temporarily or unsatisfactorily, by rule-of-thumb generalisations, there is a distinct disregard for, and dislike of, the accurate measurement of detail. The old foremanship is distinguished by these rough-and-ready methods that seem to cure immediate troubles but do not prevent recurrence by the removal of the cause; it prefers to crush opposition rather than to dissolve it. The new foremanship, on the contrary, gets down to detail, finds the causes, learns the facts, and solves and disposes of the problems once and for all; and where information is not available, means for its acquisition are introduced.

This approach to the continuous problems of supervision produces an easily distinguishable mental habit for investigating and finding the facts as a preliminary to taking action. But the practice of going conscientiously into detail can in industry, as elsewhere, be taken to an absurd extreme and bring everything to a stop pending investigation. Thus the treatment would be worse than the disease. Of course, there must be a sense of the time factor and a sense of the profitability factor. The necessity for production and the regard for urgency must compel action. However, the important point is that the new foremanship implies a persistent endeavour to find and to face facts, and by investigation and experiment to go into detail and to measure accurately where this is necessary, after taking into consideration all the factors of emergency which prevail.

It is important also that this method of approach, which might more commonly be found in connection with technical problems, should be applied to non-technical questions affecting methods and men. There is need, as a preliminary, for frankness and directness of method as distinct from concealment and underhandedness; open-mindedness should prevail over preconceived ideas; men should be dealt with in a just, straightforward manner, and should receive a square deal; there should be full appreciation of labour difficulties as distinct from deliberate misunderstanding of them;

impartiality should replace favouritism; careful consideration should preclude hurried impetuosity; there should be a determination not to abuse privileges, or to take advantage of subordinates, or to be imposed on by them, a determination to get the facts and not to be put off with excuses, and a determination to preserve throughout a severe sense of the practical and to avoid all tendencies to the imaginative. Investigation is the preliminary to security and certainty; it is the foundation to organised planning ahead, and thus paves the way for improvements in technical proficiency and in industrial relations.

9. Planning Ahead

More perhaps than any other aspect, it is the will to plan ahead that characterises the new foremanship. Efficient production is based on a steady flow of work, which demands regularity and certainty as to the future. Investigation into the causes of breakdowns in the smooth flow of output frequently reveals insufficient attention to details when preparing for production. The sense of organisation calls for planning as a preliminary to performance. Planning means forecasting the future, and this involves thinking ahead and some degree of paper work, so disliked by the old foreman. One of the most common wastes in time and material occurs in the layout of plant. All too frequently, new machinery is placed in any convenient space without regard for its relation to the present or future flow of work, and without any consideration for the introduction of further plant, or loss through waste of space. This eagerness to "get to work", and to do things quickly, is responsible for many jobs being started without properly prepared drawings, with the result that much labour and material are expended before snags are struck which would have been apparent in a preliminary plan.

The purpose of planning is to prevent rather than to cure interruptions in production; it strives to minimise any state of emergency which might arise. Planning is fundamental to, and based on, that conception of organisation which achieves output in a smooth orderly flow of work and stands in sharp contrast to continuous energetic attempts to cope with emergencies.

Planning begins with a proper layout of plant which makes the best use of the space available, having due regard for future requirements; it demands that the position of plant should be

such as to permit of continuous, progressive flow of work from entrance to exit; it should facilitate the transit of work in the minimum of time over the shortest distance; it requires that preference be given to the greatest volume of work in the event of alternative and conflicting processes being involved; and it insists on the removal of redundant plant and the replacement of uneconomical or unsuitable equipment. In carrying out these policies, due regard must be paid to permanency of position; to having sufficient working space to enable efficient operation; to leaving ample free gangway room for servicing the operative; to providing comfortable and convenient working space; to employing the quickest and simplest method of conveying work; to permitting definite storage space for finished and unfinished work, as well as for the convenient placement of necessary tools; to allowing easy access for repair, maintenance, and setting-up of machinery; and to guaranteeing maximum safety for men, machines, and materials. Then, too, the installation of equipment must take into consideration such factors as foundations, supply services in steam, water, and power, the position of natural and artificial lighting, etc.

In outlining briefly some of the factors involved in the layout of plant, it is clear that this one aspect of planning ahead raises many issues which should be settled before plant is placed in position. It is also necessary to draw attention to the conflict which commonly arises between process efficiency and engineering convenience. Where the placement of plant is left to the decision of the maintenance engineer, insufficient attention is often paid to working convenience, and here the foreman can play an important part in insisting on process efficiency as the first consideration.

The second aspect of planning as a preliminary to production concerns the priority of orders. It is necessary that decisions regarding the relative importance in time of completing orders must be taken before a satisfactory plan can be made. This will avoid any muddle arising from differences of opinion as to the relative urgency of orders. If idle man- and machine-time are to be prevented, a programme must be drawn up so as to ensure that the most important things receive attention first, and to enable those processes or component parts requiring the longest time to be put in hand first so that every detail is ready and available at the assembly stage. Priority, whether determined by customer requirements, by

strict rotation, by process sequence, or by convenience to the manufacturer, must be settled definitely and finally as a preliminary to planning and in preparation for performance.

Once priority has been settled it can be fully effective only when strictly adhered to. On this basis, planning can proceed when the elements required in production are brought together at the right time in the right place. Planning thus involves deciding what is to be begun; how it is to be done; when it is to be done; where it is to be done; and by what time it is to be completed. This means that when men and machines are available, the next job is prepared ready for production complete with instructions, materials, tools, and so forth. Planning ensures the maximum use of productive effort in men and machines by keeping them fully supplied ahead of time so that idle time through unforeseen circumstances may be reduced to a minimum.

Planning ahead is not only a process which may be undertaken largely by a special department in a big works, or chiefly by the foreman in a smaller factory; it is also a mental outlook which organises security in the future, avoiding the constant necessity to improvise because of uncertainty. It strives to foresee difficulties, instead of waiting until the bridges have to be crossed. Planning ahead is fundamental to the new foremanship, whereas the old foremanship was distinguished by its absence. It substitutes method for muddle, and order for chaos.

10. Operation Efficiency

It is the recognition of operation efficiency as the most important aspect of production, the basis on which the organisation is founded, that gives significance to the outlook of the new foremanship. The one best way of production is achieved by bringing together the right man in the right place at the right time to do the right job in the prescribed quality and quantity with the least waste and at the lowest cost. Each of these factors comprises many separate considerations. The right man, for instance, is the person with the necessary training, skill, and experience; the right place is where the most suitable machinery, tools, and equipment have been made available; the right time is when appropriate instructions have made them available at the time decided for work to commence; and the right job is that which ought to be done at that time in accordance with a reasonable system of priority.

Although the prescribed quality and quantity are procured in new jobs by devising the best arrangement of the factors mentioned, the more usual problems for the foreman arise from current production, where he is concerned with accomplishing a routine or regular job with the least waste and at the lowest cost. This involves:

- (a) The simplification of all processes and the elimination of all unnecessary movements;
- (b) Once the required processes have been settled, quality of performance must be standardised to permit interchangeability where this is necessary;
- (c) Every advantage must be taken of specialised plant, tools or devices;
- (d) Continuity and regularity of similar production must be ensured by the elimination of all intermittent operations;
- (e) Spoilt work must be prevented and wastage minimised.

Cost reduction is often to be pursued profitably by improved means of servicing the operative with raw materials and taking away finished products. This aspect of servicing the skilled operative clearly indicates the changed outlook in foremanship; for whereas under the old management the skilled workman was expected to get his tools, materials, and instructions from sources of supply, to fetch raw unfinished work and to carry away finished products, under the new method everything the operative requires is brought to him. Workshop efficiency is improved by making everything as easy as possible for the skilled operative, who is not expected to leave his machine unnecessarily, and for whom every obstacle to good workmanship in speed and quality is removed so that the best use may be made of his energy. Use is made of unskilled labourers for fetching and carrying where this cannot be more cheaply and effectively undertaken by means of mechanical handling.

Machines are devised to operate with the greatest possible ease; the operative is relieved of every unnecessary movement of leg or hand in lifting or lowering, pushing or pulling; he is encouraged to sit rather than to stand if this reduces fatigue and raises output; and rhythm in movement fat any both to speed and to quality. Working conditions such as lighting heating, ventilation, and noise are given carried consideration. Any element causing excessive

monotony or irritation such as might arise from danger, dirt, or discomfort, is removed or minimised. Orderly and methodical procedure is adopted throughout as the daily standard practice; continuous uninterrupted flow of work takes precedence over intermittent odd jobs; comfort and convenience in performance consistent with improved production are given first consideration; and skilled labour is properly conserved, leaving unskilled workers at lower cost for purely manual jobs.

Operation efficiency is pursued first by the avoidance of obvious waste in time and material; secondly, by improvement in organisation which strives for smooth working rather than trying to thrive on continuous emergency; and thirdly, by careful analysis, measurement, and rearrangement of processes.

This last approach to operation efficiency has been accomplished by the highly developed and widely accepted technique of time and motion study. While the fundamental principles employed in this kind of investigation ought to be understood and applied in a general way by the foreman, it is clearly impossible to expect an executive to take time studies, analyse them, set up new methods, and apply appropriate piece-rates, in addition to his ordinary duties.

The application of the highly specialised technique of time study is best undertaken by a separate staff department in factories of sufficient size to justify this arrangement. Whether a separate department for time study exists or not, the foreman should approach and improve operations by means of an analysis of elements, elimination of unnecessary movements, accurate measurement of essential processes, and assessment of suitable compensation commensurate with useful work accomplished. In this way, useful work is distinguished from merely hard work, and good use of time separated from long hours. Workshop efficiency takes on a new meaning when losses through idle time are measured, recorded, and charted. Supervision, in becoming a scientific process, depends on accurate time-study analysis and precise measurement of operation efficiency.

11. Selection and Placement

The new foremanship differs completely from the old in its attitude and approach to the problem of selecting and placing workers. This attitude might be described as the distinction between impartial and biased supervision. Under the old fore-

manship, staff was selected largely on personal likes and dislikes; and previous acquaintance, if it existed, played a large part. Selection was always rough-and-ready, for mistakes and misfits were rapidly replaced by further indiscriminate hiring and firing. Friendship and favouritism meant so much to the foreman that selection often amounted to finding jobs for persons rather than the reverse. Previous experience was the main issue in selection, and little regard was paid to personal suitability.

With the fundamental social and economic changes where scarcity and independence of labour prevails, and where new standards of organisation have been set up, it follows that the selection of staff must be based on new policies and practices. Trial and error is no longer possible. The pendulum of attention in supervision has swung from an almost complete concentration on materials and machines to the consideration of methods and man-power. Mass production and modern methods have reduced many jobs to short-cycle operations, and other occupations have been so limited as to restrict long apprenticeship, so that previous trade experience and technical skill is now no longer as essential as was previously the case. Selection is consequently concerned less with what the prospective employee knows and more with his ability to learn; less with what he has done and more with what he is going to do.

The new foremanship is distinguished by selection based on suitability for specific work, and this implies a thorough detailed occupational specification of the process involved and the mental and manual qualifications required. In its determination to get to the fundamental qualities necessary for successful operation, guesswork is replaced by measurement, and detailed abilities which are essential are carefully prescribed. Such qualities as manual dexterity, eye and hand co-ordination, visual acuity, colour discrimination, capacity for rhythmic operations, memory for figures and forms, and emotional suitability for monotonous routine, are all elements which are fundamental and not greatly affected in many cases by previous experience. Where the work is of a general character, where new jobs and new processes are common, and where interdepartmental transfer is a pronounced feature of the occupation, a good level of intelligence and a high degree of adaptability may be more important than other qualities.

Where long or expensive training is involved, it is necessary to

select operatives with a view to substantial service. While a certain amount of labour turnover is unavoidable, and indeed in some cases necessary, an excessive degree of fluidity is an unhealthy condition which reflects unfavourably on both selection and supervision. The new employee should be chosen for reliability and dependability with a view to continuous and regular employment where absenteeism and short service are prevented from the outset.

Admittedly these general factors will vary in importance with circumstances, but on the whole, the tendency in the new foremanship is to give preliminary consideration to details which formerly, if taken into account at all, were relegated to comparative insignificance. In the rearrangement of requirements, erstwhile minor matters have become questions of major importance, and details hitherto disregarded are now subject to careful enquiry. Naturally, selection must be based on the fullest information as to age, experience, education, physical qualities, and length of service in previous employment. Interviews should not consist of general, isolated questions; they must be related to specific requirements of the factory in building up an organisation which accumulates experience and ability as a basis of development in size and efficiency.

The great importance of man-power and the many factors requiring careful consideration as a preliminary to selection have been responsible for the widespread introduction of the Personnel Department, which specialises in, and centralises, all activities concerning employment. The old type of foreman has greatly resented the curtailment of his duties and privileges, for he depended on hiring and firing as his chief instrument of discipline. Although the details necessary for accurate selection and preliminary placement are not now regarded as the responsibility of the foreman modern personnel practice breaks down if he is not fully aware of the procedures used and of their significance in the selection of staff. He must be able to carry into practical effect in placement and promotion those principles regarded as best practice in fitting the right man to the right job.

The Personnel Department offers a service to, and collaborates with, the foreman in supplying his staff requirements as accurately and as precisely as circumstances will permit. This functional arrangement has many advantages:

- (a) It regularises and stabilises employment;
- (b) It centralises all contact with labour supply;
- (c) It provides a clearing house for interdepartmental transfers and internal promotions;
- (d) It ensures uniform application of the company's personnel policies;
- (e) It permits standardisation of working conditions;
- (f) It allows for specialisation in the selection and testing of new staff;
- (g) It investigates complaints and grievances;
- (h) It stimulates social activities;
- (i) It supervises mutual benefit plans;
- (i) It controls all first-aid and medical services;
- (k) It facilitates the compilation of all staff records;
- (1) It promotes staff development through preliminary instruction and by other means.

The new foremanship insists that the modern machinery for selection be in mesh with the daily practice of supervision, and can only succeed when this is the case.

12. Training

One of the mainstays of the new foremanship is the emphasis which it places on training competent operatives. It must be admitted that training is a common feature in industry, and a process which is going on more or less continuously as employees gain and apply their growing experience. The old foremanship, imbued with the idea of long apprenticeships, favoured the process of absorption where the new worker was placed with an older one to pick up what he could and learn by imitation. Whether the older worker was capable either as an operative or as a teacher was usually left to chance, for it was thought wrong to mollycoddle trainees since good men found their feet and came to the top as the result of, or in spite of, every obstacle placed in their way.

The older hit-or-miss method of training by the acquisition of experience through trial and error is being changed by the new foremanship, which insists that untrained operatives are a danger and a liability. The process of casual informal absorption is replaced by intensive formal instruction. Training of workers is recognised as an essential function of foremanship, for workshop efficiency depends on the ability of the operative and the way in

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which that ability is applied. Waste of time and material due to the inability of operatives is removed by intensive competent instruction. The cost of training cannot be avoided, but it can be reduced and made far more effective by the use of the most suitable methods. Consequently, teaching must be regarded as a specialised job calling for particular abilities not possessed by every skilled worker, so that the instructor must be selected by the foreman with the greatest care.

As a preliminary to actual instruction, a planned programme must be prepared, and this includes a careful analysis of the job to be taught, so that the essential features can be explained and the details demonstrated from the viewpoint of the trainee. Once it has been decided which operatives are to be trained, the established stages in the learning process must be followed. The trainee must be settled into a frame of mind for learning; slow-motion demonstrations with full explanations should be precisely, simply, clearly, carefully, and patiently conveyed; the operative properly taught should acquire proficiency gradually by practical application; mistakes should be pointed out, and competent craftsmanship in quality should be encouraged as the basis of proficient performance in quantity; accuracy should precede speed; and thoroughness should be regarded as more important than turnout.

The value of proper training is to be observed:

- (a) In reduced waste of materials through spoilage;
- (b) In reliable and competent performance;
- (c) In minimising the time necessary to attain proficiency;
- (d) In making the best possible use of men, materials, machines, and factory space;
- (e) In lowering the degree of inspection and the amount of individual supervision necessary;
- (f) In lessening the risk and the extent of labour turnover through mutual dissatisfaction over personal progress;
- (g) In reducing customer complaints as the result of incompetent workmanship.

The new foremanship recognises that the greatest degree of reliability in service rests with the accumulation of the maximum useful experience, and this is acquired not necessarily by a staff of long standing but with a staff quickly and properly trained to apply all available experience.

Whether training is conducted by one skilled workman or by a specialised teacher, and whether it applies to operatives on short-cycle processes or to apprentices with a long-term course, is incidental and dependent on circumstances. The important point is that the new foremanship recognises:

- (a) That training is essential to the retention of staff;
- (b) That it must be conducted competently;
- (c) That the course should be intensive;
- (d) That the processes taught should be accurate in detail;
- (e) That the method must be appropriate, direct, clear, a explanatory.

The new foreman must be able to teach, and must have operatives willing to learn. Training should be regarded as a continuous process where new instructions are accompanied by explicit explanations. The new foremanship prefers continuous striving for proficiency to complacent dependence on past experience. Poor staff reflects discredit on the foreman who, if competent, should surround himself with good understudies and efficient operatives.

13. Giving Orders

The new foremanship recognises that one of the integral factors in getting results is the giving of orders. Communication in large and expanding organisations is a continuous problem which is concerned with the manner and method, rather than with the material, of the instruction given. Results in industry depend on getting the correct instructions properly carried out, and it is recognised that one of the chief obstacles to accurate and rapid operation is the inability to get orders transmitted quickly and precisely. Considerable misunderstanding and friction frequently arise in the workshop through instructions being disregarded, either unintentionally or wilfully, and in consequence a technique of communication, of giving orders, and of sensible supervision, is in process of being built up.

In the first place, instructions, wherever practicable and when of sufficient importance, should be conveyed in writing, but whether written or spoken, they should be precise, clear, brief, simple, consistent, and limited. In contrast with the old foremanship, orders should be self-explanatory and should allow of that degree of flexibility which permits intelligent adjustment as circumstances

demand. The supervisor should be approachable for further explanation, and should be prepared at the same time to justify his orders. Operatives resent the foreman abusing his privileges by giving dogmatic orders without consideration for the person who is to carry them out. It is a general failing, especially where verbal orders have been given, that any blame for consequent errors is placed on the subordinate without regard to possible omission or confusion in the manner of giving orders. The errors which arise in ordinary correspondence are sufficient to indicate that precise meaning can be conveyed only with the utmost care in expression—a feature almost universally lacking.

The new foremanship recognises that authority for giving orders implies also responsibility for seeing that they are properly carried out. Instructions must be necessary; they must be accurately conveyed; and they should not be subject to interference or confusion by contending authorities. Human nature being what it is, the manner of delivering orders has some considerable bearing on their satisfactory accomplishment. Naturally the manner, whether of command or request, must be related both to the character of the order and to the type of person concerned, cases of emergency being treated differently from those less urgent, and important matters differently from trivial details. While the lazy, indifferent-careless, or disobedient operative needs firm treatment, the conscientious, hardworking, untrained, or highly-skilled workman reacts more favourably to suggestion and persuasion.

Giving orders implies also giving reproof. The reprimand is an important instrument for correcting poor workmanship or bad behaviour, but it must be based on facts accurately assessed. This precaution of discovering the cause and character of errors (which may be due to faults in system or to negligence) as a preliminary to reproof, makes sure that correction is directed along the right lines, that criticism is fully justified, and that the measures adopted are fair and in accordance with the seriousness of the case. As distinct from the old foremanship, the reprimand is administered impartially, without display of temper, and with a view to correcting the error. Plain, straightforward language is used, and where necessary, explanations given. Serious cases ought to be dealt with in private. Where correction is the chief aim of reproof, the common faults of excessive criticism, nagging, and threatening the operative must be avoided. Reprimands should be made

firmly and promptly, and only referred to again if correction does not follow immediately.

Since an operative in carrying out instructions risks reproof for poor performance, he should in fairness be entitled to commendation for good workmanship. The general tendency in factory administration is to over-emphasise criticism and to ignore praise. The emphasis on "unite and rule" as distinct from "divide and command" places co-operation at a premium, and this can be more easily achieved by justifiable commendation than by unnecessary criticism. The attitude that everything is wrong and nothing right is all too common. In contrast, the new foremanship strives to stimulate workpeople to better performance, and to greater interest in, and more intelligent understanding of, their work, by an emphasis which relegates criticism to an acceptable and necessary means of correction. In the smooth running of a department praise is regarded as a better lubricant than blame.

Good discipline is essential to the effective organisation of the working force, and is largely determined by the manner of giving orders. The degree of strictness imposed in the workshop will depend on the character and capacity of the workpeople. Rules and regulations are set up to ensure that departmental performance is not impaired by individual shortcomings. The extent to which restriction can be imposed on individual freedom of action naturally has a definite limit beyond which it becomes ineffective, and beyond which orders may not be carried out, or efficiency may be impaired, or workpeople may be lost. Effective discipline may be said to exist when operatives recognise as necessary, and willingly accept, those regulations and restrictions essential to the orderly conduct of the department in securing the best results. Matters requiring disciplinary action are for the foreman to decide, and include dilatoriness, bad timekeeping, absenteeism, slacking, carelessness, insubordination, horseplay, and abuse of privileges. The appropriate methods of correction, which vary from a curt reprimand to removal from the job, or from temporary suspension to permanent dismissal, must be determined by the seriousness of the offence and the character of the worker.

Discipline is a matter which rests largely between the worker and the foreman, where the conduct of, and orders given by, the latter play an important part. Where a large measure of cooperation exists in the workshop, disciplinary action is less frequent,

less necessary, and less severe than where teamwork is almost nonexistent. Where the workpeople are intelligent and the work calls for intelligent adaptability, results are best secured through reasonable requests made in a considerate manner. If the foreman is aiming at better working relationships with a larger measure of co-operation and a higher degree of understanding, instructions must be detailed, consistent, and reasonable, and should be administered fairly and impartially, while his attitude ought to be tactful, considerate, and even-tempered. The results of the department over an extended period constitute the criterion which must decide whether restrictive measures are necessary, these being then based on the character of the workpeople and the temper of the times, both of which determine the most effective means of correction. Whereas bullying and harsh measures were employed when repressive action was considered the only way to secure discipline, the new foremanship strives to effect correction by encouragement to better effort rather than by reprimands to secure restrictions.

The growth of individual independence, fostered by the spirit of the times and accelerated by a war to secure greater personal freedom of action, has converted discipline by power into a discipline of consent. There is an emphasis on leading as distinct from driving; on persuasion in contrast to dictation; on selling ideas rather than imposing orders; and on consultation with those concerned, before decisions are made, instead of casually advising them after action has been taken.

The new foremanship is not to be considered as easy-going or as lending itself to imposition. On the contrary, it insists on firmness in giving orders, and determination in getting results by means of a wider choice of those methods which stress stimulation in preference to restriction, and it encourages co-operation instead of engendering discontent. The measures taken to ensure discipline in the workship reflect the character of the human relationships prevailing there. Flexibility of method and manner, to make executive action more suitable both to the situation and to the individual, is to be regarded as a technique of the new foremanship. Rigid application or predominant use of one manner of approach is a danger which lurks in all supervisory work, and is likely to become more persistent as the years of executive service grow.

14. Incentives

In further pursuance of the policy of building up industrial relations, the new foremanship employs a wide variety of incentives, both financial and non-financial, to stimulate the individual to better results in the quality and quantity of production. It is accepted, first of all, that operatives work best when a motive is provided sufficiently strong to stimulate personal interest, and further, the stronger the incentive and the greater the reward, the better the result.

Wages, although a payment for time worked or results obtained, are now viewed as one of the chief instruments for securing the performance desired in workmanship and output. The fundamental requirement of all incentives is fairness, and this implies a square deal between employer and employee, as well as justice in discrimination between operatives. For an incentive to work effectively, both the employer and the employee must be satisfied that the work done and the payment received represent a reasonable exchange. Wage administration to fulfil these conditions is a major problem of industry, which is most satisfactorily achieved through an accurately determined piece-rate.

A vast variety of systems for payment by results have been devised in the last quarter of a century, and this has been misleading, for the system chosen is of only secondary importance to accuracy of measurement, on which it is based, and which is determined by competent motion and time study. Accurately determined standards of performance provide that basis for fairness which is acceptable both to the employer and to the employee. The standard time set for a piece of work of stated quality should take into account and make due allowance for all probable contingencies, including fatigue and delays. The cash payment for output takes into consideration many factors, such as the skill required, normal working hours, working conditions, job peculiarities, responsibility, and service. Instead of being separately assessed, however, these factors are related to the standard earnings for the same or similar occupation in the factory concerned, in the immediate locality, or elsewhere in the same trade. Wages are relative; they have meaning in relation to the remuneration paid in comparative jobs. Although the living wage and the cost of living are factors which enter into existing wage levels, these negotiated and generally accepted hourly rates must be regarded as the basis of the fair wage.

Financial incentives only commence when wages rise above this general level.

Payment by results offers the easiest and most straightforward financial incentive, and should be devised so as to inspire optimum effort. Piece-rates, however, in order to be properly effective, must be based on carefully measured work so that fairness prevails. In this way, the employer is satisfied because he is safeguarded against unforeseen increases in the labour cost of manufacture, and the employee is content because he is, or should be, secure from rate-cutting. Of the wide choice of piece-work plans available, both group and individual, selection must be settled according to circumstances, but in general, a simple, easily understood arrangement is to be preferred, favouring straight piece-rates. The new foremanship insists on accurate measurement as the basis of piecework payment, which stands in sharp contrast with those arbitrary rule-of-thumb rates quickly devised and often long regretted.

Time and motion study, because of its practical outlook as well as its obvious and immediate financial advantages, has had wider acceptance than any of the many newer devices; yet, even so, there still remains an enormous field in industry where piece-rates are settled by the foreman in direct negotiation with the worker, or by the management in an armchair bargain with trade union officials.

The fundamental weakness of the old foremanship is its dependence on bargaining, and pitting the power of authority against the resistance of the worker, whether represented or otherwise, so that an atmosphere of mistrust and suspicion exists. Opposed to these methods, the new foremanship prefers first to create an atmosphere of mutual trust where time-study investigations can be conducted openly, and a fair rate worked out that can be demonstrated as reasonable. It is necessary again to underline the difference between the old foremanship, which by rough-and-ready methods negotiated arbitrary and unnecessarily complex piece-rates constantly subject to adjustment with unforeseen rises or falls in earnings, and the new foremanship, which by accurate and detailed measurement produces a piece-rate which can with confidence be fixed and related to a definite stated piece of work.

In spite of the advantages of payment by results, both to the management and to the men, time-work is widespread throughout the country. Spicer, in a study of British engineering wages,

states that half the employees in the metal industries are engaged on time-work. Owing to the prevalence of time-rates negotiated between Employers' Federations and organised trade unions, the minimum rate for the worker commonly becomes the maximum rate paid by the employer. However, the overpowering need for an incentive becomes obvious when the work done is stressed as distinct from the time worked; and when the unit cost is emphasised in contrast to the wages paid.

It may be said that wherever the accurate measurement of work done can be used as a basis of piece-work or group bonus, financial incentives are preferable unless they interfere seriously with quality of workmanship. Time-rates, graded according to performance, proficiency, or service, are sometimes employed to provide an incentive to, and reward of, individual effort. Profit-sharing is a method employed to encourage teamwork and to stress common interest in prosperity and the mutual sharing of profits. Although suitable for management and foremen, profit-sharing often fails as an important incentive for operatives because it is deferred, indefinite and uncertain. It becomes effective only in good times; its amount is dependent on factors well outside the control or influence of manual workers; and its determination takes so long that the reward does not follow quickly enough on the performance.

In recognising the importance of providing motives to stimulate individual effort in industry, the new foremanship gives considerable attention to those non-financial incentives which create the most suitable conditions conducive to maximum effort. By first removing causes of dissatisfaction, the way is cleared for installing the conditions necessary for contentment. Perhaps the most widespread cause of discontent in the workshop has been the fear of dismissal. Contrary to common contentions, uncertainty of tenure does not stimulate the competitive spirit but more frequently engenders a dread of unemployment, and good steady workmanship is not compatible with constant fear. Closely associated with uncertainty of tenure is the irregularity of income which occurs with fluctuating hours of work. Non-financial incentives are also promoted by attention to working conditions. When the policy of the firm provides for those conditions of comfort which assist production, such as good lighting, proper ventilation, decent cleanliness, suitable seating, labour-serving devices, protective clothing, accident preventives, canteens, first

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aid, and the like, a powerful influence exists in permitting the operative to function in conditions with the least possible outside irritation.

In building up those conditions necessary for contentment, the first consideration concerns the suitability of the worker for the job, and, as explained previously, suitability, apart from skill, experience, and intelligence, must include not only the willingness to work, but the willingness to work with existing employees. Then, too, proper explanation and careful training are required as preliminaries to good performance, and in the course of this instruction the importance and interest value of the job should be stressed. Pride of workmanship in quality and quantity, and the display of skill can provide strong motives for even greater striving. Once these initial steps have been established, the ground is prepared for the foreman to exercise his personal influence. In many ways, the incentive to individual improvement can be stimulated by the foreman by proper and impartial administration of praise and blame. By taking a personal interest in individual performance and progress; by showing appreciation of good work; by recommendations for promotion; by stimulating interest in the job; by encouraging suggestions for improvements; by stressing collective responsibility; and by emphasising the common benefits of co-operation, the new foremanship is making the best use of those non-financial incentives which lie within its power to exercise.

15. Control

One of the distinguishing features of the new foremanship is insistence on control through accurate records. Under the old methods of management, clerical work was regarded as unnecessary and to be reduced to a bare minimum as a major point of policy. Arising from the belief that the only useful work done in production was carried out by operatives engaged on actual processes, the measurement of output often amounted to guess-work, and comparison with previous performance was entirely a matter of memory.

To-day, in large-scale concerns, control is effected through a complete system of co-ordinated records and reports, which, while centralised in a statistical office for purposes of clerical economy, is used as the basis of both managerial and supervisory control of

departments. It is recognised that where authority is assigned it is imperative that adequate information by way of complete records is provided to permit the full exercise of responsibility. If the foreman is to be held responsible for the output and costs of a department, he must not only be provided with accurate records, but must be made aware of the method by which they are compiled and the way in which they are to be used to the best advantage. Meagreness and roughness of current records in many factories are prime causes of unwitting waste. In some extreme cases, the foreman does not know the wages and carnings of the operatives in the department, and yet his main purpose is to achieve reduced costs of operation. It is argued by some that all information about wages and costs should be kept confidential; that it is beyond the control of the foreman to remedy, and therefore of no concern to him, but this view is to be most strongly deprecated.

Departmental records are to be regarded as a tool of production, and must comply with those essential requirements:

- (a) That they serve a useful, practical, and worth-while purpose;
- (b) That they are accurate;
- (c) That they be simply, quickly, and cheaply obtained;
- (d) That they be timely and available for immediate use;
- (e) That they be sufficiently adequate and complete to permit definite and confident action.

Records are justifiable only in so far as they contribute to the control of a department and lead to improvements through the elimination of unnecessary wastes in time and material. If properly viewed, records ought to suggest where action is necessary and the course to take; the facts made available should prevent wrong measures being taken and should support the methods proposed. Records not only facilitate investigation but indicate where further analysis is helpful.

If the foreman is in fact to be regarded as the manager of his department, he should be provided with those tools necessary for departmental control in the same way as the superintendent is provided with essential information to facilitate factory control. Usually, records are first necessary to permit labour cost control. Both prime and secondary labour costs should be shown separately and related to output so that individual production and group output per operator per hour and cost per unit of production

should be readily available. The degree to which product and departmental labour costing records are provided for the foreman will depend on the character and constitution of the product, and the extent to which seasonable changes affect unit costs. It is obviously of fundamental importance that individual and group efficiency figures be calculated so that losses through idle time are known and recorded as preventable or unavoidable.

In some industries, material cost is as important as, and sometimes more influential than, labour cost, so that records should be available to show the current and comparative costs of material. The general total cost of material should be supported by detail records to show the sources of waste in working scrap and spoilage. Apart from the prime and secondary costs of labour and material, there is a growing tendency to make the foreman cost minded by supplying him with details of his overhead expenses so that he may be all the more aware of such expense items as machine depreciation, running cost, power, steam, lighting, rates, and similar items incurred in the department, and their influence on total cost. Where this practice is adopted it is common to provide a budget which can be treated as a target to direct the aim of the foreman. In this way, also, the performance of the foreman can be measured by comparison of the results achieved with the budget set, so that praise or blame, promotion or demotion, compensation or condemnation, can be administered justifiably. Then, too, the provision of detail figures of costs enables the foreman to develop a business sense in relation to production, and permits him to view problems with a sense of proportion. If the foreman can be directed to give his attention to the important aspects of cost and relegate to their proper position trifles which often absorb his time, and to delegate details more freely, then supervision can contribute more effectively to cost reduction and, at the same time, permit higher rewards for improved results.

A second kind of control is concerned with quality of work-manship. As distinct from the old methods of rough sampling and haphazard correction based on varying personal opinions of acceptable quality, the new foremanship is concerned first with the setting up of a standard of workmanship compatible with practicability, permissible cost, pressure of output, and personnel capacity. An attempt is thus made to state clearly and make known generally the standard of workmanship required so that personal opinion is

controlled by established fact. The method of quality control will naturally depend on the character of the product, the use to which it is to be put, and the permissible cost; but usually the percentage number of rejections, the proportion of spoilage, and the number of customer complaints all act as an indication of workmanship. Further analysis of the causes of poor quality is frequently necessary and still further detailed investigation is often essential to establish the responsibility for poor work.

The third and fourth methods of control over quantity and service are to be found linked together under a system of planning. It is not only necessary to decide definite quantities for manufacture to enable a planned programme to be drawn up, but it is also essential to relate output to the time taken. In contrast to the casual method of chasing late jobs, control is introduced to permit those part-products requiring the longest time to be commenced first, so that final assembly can be synchronised by a steady flow of the right parts, in the right quantities, at the right time. Instead of depending on memory or waiting until jobs become desperately urgent, a time service control is used to foresee and correct delays in manufacture before an emergency arises and before delivery promises have been broken. The new foremanship prefers to control by statistics, whether in card, sheet, or graphical form, rather than depend entirely on a sight of work in progress. methods indicate a need for, and dependence on, system as distinct from drive alone as a means of getting results. A routine of records is established to provide regular and accurate information for use in the proper conservation and application of supervisory energy. The foreman is thus directed to major problems according to relative urgency, and routine is limited to permit maximum time for the exceptions.

The habit of keeping, and the dependence on, records for control soon intimate the extent to which facts and figures are worth the trouble and expense of computation. Centralised collection and calculation of vital information are essential in order to ensure accuracy and economy, and at the same time, to prevent the foreman becoming merely a clerk. The foreman's job is not to compile records, but to use the information they provide, and this distinction cannot be stressed too strongly. Records must be regarded as servants, not masters; as tools to obtain better results, not as achievement in themselves. Control is not only a process for

measuring and recording production performances. It provides also the means whereby future arrangements can be directed; its concern with past history is merely to find facts and to make the most of experience in the conduct of current affairs.

16. Teamwork

The new foremanship aims for, and achieves to a marked degree, that synthesis of effort called teamwork. The tone of a workshop is not an imaginary aspiration but a real condition which indicates the working atmosphere and the attitude existing between the supervisor and the operative. A group of workers in a department may be likened to a football team, where success or otherwise depends on the amount of collaboration or the extent of friction existing. It is important to point out that co-operation is not to be bought with concessions, any more than supervisory leadership is to be confused with popularity arising from easygoing discipline and general slackness. Teamwork, although an admirable aim and a desirable condition, is not to be purchased by negotiation, but acquired as the natural outcome of first-class foremanship. Co-operation is invaluable when it advances the general well-being of the company; but if, as can happen, it descends to the state of mutual cancellation of mistakes, it can be a positive danger.

Teamwork is a condition which depends primarily on the supervising executive, for on him rests the responsibility for the selection of those persons who show themselves capable of working in a team. Obviously, friction must be avoided, and here the foreman can be of immense influence in preventing disputes before they arise, by foreseeing and investigating promptly the causes of justifiable grievances. The new foremanship is based on the square deal, where the rights of workers are considered and justice is administered impartially. In contrast with the old foremanship, which regarded any consideration of a complaint from the operative's point of view as an inexcusable sign of weakness, the new technique of supervision prefers to find and face the true facts, to concede where circumstances justify, and to explain the reasons for decisions in other cases. To supervise reasonably implies an obligation on the part of the workers to react reasonably to discipline. To criticise fairly, to correct constructively, to consider complaints carefully, and to instruct precisely, are the

essential preliminary conditions for teamwork. The atmosphere of the workshop reflects the conduct of the foreman: where he is reasonable, a similar response is found in the operatives; where he is slack or slap-dash, an absence of precision is evident at the operative level.

Changes in supervisory technique naturally call for higher executive competence than formerly, in order to ensure that both the purpose and the method of the new foremanship are properly related. The person in charge must see his aim clearly and be able to plan accordingly. Improved industrial relations which signify teamwork must be built up logically, otherwise better working conditions will be interpreted as coddling workers; contentment will imply complacency; and fairness will be confused with slackness. The new foremanship must reveal such features (desirable in all executive work) as thoroughness and concentration; decision and drive; sense of proportion; patience and consistency; capacity for detail; ability to direct and power to encourage; and a clear purpose with an organised plan. The methods of the new foremanship are devised to create teamwork, and not to arouse resistance. Supervision should aim at building up group co-operation rather than trying to break down the group into individually competitive units. The approach of the foreman should be frank and straightforward, direct and tactful. It should indicate consistent competence in the treatment of men, their disputes and their grievances, along with a capacity for administering justice with fairness. There should be a capacity for fair and just supervision where orders are accepted without demur.

The creation of teamwork can be achieved by eliminating those irritating features which cause friction in industrial relations and which hinder co-operation. Perhaps of more importance than any other detail is the need to establish security of tenure by ensuring continuity and regularity of employment. Teamwork is obviously impossible where high labour turnover exists, especially if this is due to unreasonable and inconsistent supervision. Misunderstanding is also a common cause of friction, and is due in many cases to insufficient, confused, or conflicting instructions. It is necessary both that the foreman himself understands, and that he in turn is clearly understood. A third point is that discontent arises where there is little or no consideration given to employee grievances, and where there seems no intention of dealing with

such greivances. Fourthly, resentment can be attributed to unsuitable or unfair corrective discipline. Fifthly, dissatisfaction is very apt to arise when the true facts of the matter are unsought or disregarded, and praise or blame apportioned unfairly. Sixthly, dissension in the worker may imply either a lack of suitable incentives, or improper selection and placement. In this latter connection, it should be made clear that where employees are obviously unfitted either for the jobs to be done or for co-operation in the department, then removal and replacement are justified before any attempt can be made to build up a working team.

With the object of securing better departmental results through the attainment of teamwork, employees can then work together in harmony, their energies being usefully directed and effectively stimulated by collaboration, instead of being frittered away by internal friction and poor organisation. Teamwork, as with other features of the new foremanship, is not an end in itself, but a means towards an end—getting results, the purpose to which all functions contribute and by which they are each evaluated.

17. Development

A feature of the new foremanship is its regard for, and technique of, departmental improvement. This is not a set body of new methods or a settled list of new devices, but rather a point of view which fundamentally acknowledges progress as a constant problem and a continuous process. While the new foremanship seeks and willingly accepts improvements, the old foremanship resists them until forced reluctantly to acquiesce. Development is not to be regarded as unstable adoption of every new suggestion and willing rejection of everything old and long-established, but rather the realisation that the best-known methods of to-day, like current models in motor-cars, will be superseded as experience accumulates and as circumstances alter conditions.

Improved departmental efficiency requires first, the willingness of the management to consider and to encourage suggestions; and secondly, the determination and ability of the foreman to make improvements. Constructive criticism must replace unquestioning compliance. The new foremanship requires a healthy dissatisfaction with the prevailing standard of proficiency, and a belief that allround improvement is possible; and it stands in sharp contrast to the attitude that existing systems and methods cannot be improved.

Too frequently in the past, foremen regarded one suggestion or one device, for which they were responsible, as sufficient justification for permanent recognition. Development in modern industry is so insistent and so compelling that it can never remain static but must keep on finding better and still better methods of manufacture.

Development, if it is to be logical and permanent, must depend on a clear view of current trends and future tendencies. With the many changes which are taking place every day, the foreman should be able to discriminate between temporary difficulties of detail and fundamental problems of principle; to distinguish between the insignificant and the important. The new foremanship must face facts and admit, firstly, that new technological processes and greater skill in organisation will facilitate continuous development of mass production methods; secondly, that the effect of the customer in direct control of employment and wages must be accepted and adopted as a principle and practice of organisation; thirdly, that the growing independence and power of labour through trade union action must be recognised; and fourthly, that legislation may be expected to have greater influence on working conditions and business practices.

Taking a proper view of current events, the new foremanship can keep ahead of the times and can prepare for the future by avoiding retrograde steps. A general improvement of industrial relations can be accomplished through a process of continuous education. Recognising this change in outlook and its accompanying spirit of co-operation, it is obvious that the new foremanship must first develop employees to make them receptive of improvements, and in this connection the following points may be borne in mind:

- (a) The whole department is of more importance than any single individual or group of individuals;
- (b) Success in industry demands co-operation towards a common aim;
- (c) Organisation is to be built up by recognition of common collective responsibility, not broken down by intense individualism;
- (d) Contentment at work is not inconsistent with competition;
- (e) Progress, permanence, and prosperity go hand in hand;
- (f) Scope for initiative and incentive are provided within the bounds of constitutional procedure.

Development within a department is frequently conducted along the lines of reducing waste in time, labour, material, machinery, and auxiliary services. Almost every process in manufacture is subject to some waste, so that development through cost reduction is a continuous process.

- A. Time can be saved by:
 - (a) Adopting better methods;
 - (b) Avoiding or dealing promptly with delays and break-downs;
 - (c) Preventing idleness, slackness, or waiting;
 - (d) Ensuring the giving of full and correct instructions;
 - (e) Eliminating excessive overtime;
 - (f) Insisting on adequate planning ahead;
 - (g) Creating a sense of time consciousness.
- B. Labour can be saved by:
 - (a) Making careful analysis of operation efficiency;
 - (b) Economising in skilled labour by greater use of labourers and by the substitution of men by women;
 - (c) Providing a system of proper service to the operative;
 - (d) Installing suitable incentives;
 - (e) Encouraging personal efficiency;
 - (f) Using machines and devices to reduce the amount of labour required;
 - (g) Removing causes of fatigue and monotony;
 - (h) Reducing labour turnover;
 - (i) Establishing effective training.
- C. Material can be saved by:
 - (a) Insisting on proper storage;
 - (b) Preventing careless or rough handling;
 - (c) Avoiding spoilage or soiling in transit;
 - (d) Setting up exact standards of inspection and so avoiding the acceptance and use of unsuitable raw materials or goods before process;
 - (e) Rejecting immediately bad workmanship and remedying its causes.
- D. Machinery can be put to better use by:
 - (a) Insisting on proper maintenance and repair of plant;
 - (b) Keeping tools and equipment in good condition and ready for immediate use;

- (c) Preventing accidents through giving proper instructions:
- (d) Removing redundant, and replacing obsolete machinery.
- E.
- Auxiliary costs can be reduced by:
 (a) Economising in the use of heat, light, space, and power;
 - (b) Insisting on process efficiency as distinct from engineering economy;
 - (c) Saving floor space by removing unnecessary equipment; by storing work in process; by providing proper gangways; by economic layout with sufficient, but not excessive, working space.

There is no end to the methods of cost reduction and waste correction by which departmental development can be secured. While some of these economies may be undertaken by the management through the specialised departments of time and motion study, centralised stores and purchasing, or personnel management, much still remains for the foreman to improve upon.

Development is to be regarded as one of the chief functions of the new foremanship, for it must not only reduce the leaks and losses always existing, but build up a proficient working force. This means that the foreman himself must accept the need for selfimprovement, and that his managerial methods must be modified and his capacity for supervision developed. For in this process of departmental development, changes must first commence in the foreman, who must be an example to his subordinates, and he must remove those weaknesses in himself that prevent improvements being made. To this end, the foreman, being human, should have some incentive by way of recognition, reward, or promotion, which if possible should reflect, and be related to, those departmental improvements directly attributable to him.

18. Supervisory Leadership

To conclude, and briefly to co-ordinate the ten-point policy of outstanding features in the new foremanship, it may be stated that the one aim is better results through improved executive proficiency, which might be described as supervisory leadership. The great importance of the problem and the urgent need for improvement will be accepted as prevailing phases of supervisory incom-

petence become recognised. As dissatisfaction with the methods of present-day foremanship grows, there will arise a more widespread demand for better supervisory practice. The purpose of describing the prominent features of the new foremanship is to direct attention to the lines along which development should proceed. Once the aims have been clearly set out, and accepted, the practical measures to be adopted can be easily devised. But let it first be frankly acknowledged that conversion to new ideas in industry must commence at the top, where major responsibility resides. Managing directors must first insist on higher levels of executive performance from both managers and foremen. Practical business directors are not usually slow to appreciate that while products and systems are important, they depend chiefly on the men appointed to the higher and lower levels of management. Insistence on competent management as a preliminary requisite to profitable production is a practice constantly gaining ground.

Following the appointment of first-class higher executives is the urgent need to have proficient supervisors. Modern largescale factories cannot be run entirely on the plans and policies devised at the top; it is vitally necessary also that these should be carried out. This requires, in the first place, that supervisors should have sufficient judgment to know what is possible in practice, and sufficient competence to be able to devise the best ways and means for putting policies into effect. In the second place, it is necessary that the fullest possible use be made of experience gained from practice, and that this be reported back in the form of suggestions for improvements or modifications. The managerial and supervisory force must be more than a mere one-way mechanism which carries out instructions with unthinking obedience; it must consist of more than unimaginative executives blindly carrying out policy, irrespective of its suitability or otherwise in practice. While it is important, under the new foremanship, that similar intelligent flexibility be found in the operatives themselves, it cannot be stressed too strongly that this adaptability must first be in evidence at the top, in the relationship between directors and managers, and between managers and foremen.

If this new outlook can be regarded as the new leadership in industry, then because authority is graded throughout the hierarchy, responsibility can be more fairly distributed. It is necessary not only that competent men be appointed, but that the best possible

use be made of them by insisting on common and collective responsibility for profitable results within the company.

The new leadership in industry must be regarded as an attribute of authority which is graded from the top through the stages of management and supervision. The new foremanship must be brought about, first, by conviction in the directors and managers, followed by conversion of the supervisors. A new outlook above must precede a new attitude below. The new foremanship must be regarded as a major problem for the management before it can become the accepted practice of the supervisor. It must be determined whether obstacles to improvement lie chiefly in the outlook of the management, or in the attitude of the foremen.

As pointed out, the difference between the old and the new foremanship is so fundamental that it must be referred to in the general terms of diametrically opposed attitudes. The products and processes, the methods and material, the titles and duties, the authority and responsibility, the personalities and proficiencies in industry vary so greatly with individual companies that, without abandoning fundamental principles, the means to be taken for adopting as standard practice the aims set down for the new foremanship must in some measure be regarded as are the details of operation, a matter to be decided by each concern. Once the aim of the new foremanship is clearly understood and fully accepted, the practical means of achievement, depending on circumstances, must be devised individually, for the problem of dealing with differing problems and personalities in each plant will play an important part. But in this vast mass of differing detail in practice, the need for the new foremanship is based on common ground; since there is a common purpose in, and a common demand for, an executive proficiency which can be rightly summarised and conveniently designated as supervisory leadership.

The aims of the new foremanship, in conclusion, may thus be expressed: to be quick but not hasty with decisions; to investigate the facts before action, rather than to make impetuous decisions on scanty information; to measure and not to guess; to accept the fundamental facts open-mindedly without prejudice and to reject the trivial and superficial; to organise routine work and to improvise in an emergency; to administer with impartiality and to eliminate favouritism; to lead rather than to force; to explain instructions clearly and not simply give dogmatic orders; to train

employees to high standards of proficiency and to avoid slackness and slovenliness in operation; to commend more and to condemn less; to encourage workers and not to dispirit them; to engender certainty and to dispel insecurity; to create contentment in teamwork and to prevent friction from misunderstanding.

SECTION III

THE FOREMAN AND HIS JOB

19. Supervisory Shortcomings

The rapid adoption of those fundamental principles described under the designation of "the new foremanship" is entirely justified by a brief consideration of supervisory shortcomings which cause general dissatisfaction. Generally, the main reason for improving the standard of supervision is to enable the foreman to appreciate the nature and trend of industrial changes and, in consequence, to adopt new methods to meet the new circumstances. Workshop operations have increased in scale, in complexity, and in the speed with which they move. The workman is growing more enlightened, independent, and insistent on his rights. Managerial specialists are devising new systems of control to facilitate greater economy from mass production. The foreman is faced with a demand for higher output and the need for new processes and new methods, and with a changing and uncertain working force. It becomes apparent that he must now, of necessity, either get on or get out. He must be willing to adopt new policies and new ways of working. The foreman who would be successful must be up-to-date, look ahead, and make suggestions for improvements rather than have them imposed upon him.

Some of the chief faults to be found among foremen may well be outlined:

(a) Inability to Delegate Work

Where a foreman has been upgraded from operative rank there commonly exists a preference to do manual work himself, or to concern himself exclusively or too closely with technical processes. It is, of course, a general defect among many executives that they give most attention to those jobs with which they are most familiar or which they can do best, instead of concentrating on the work prescribed either by importance or urgency. A foreman not only has to organise the work of other people, but has also to arrange his own duties so that his time is spent to the greatest advantage. Inability to view his own work dispassionately results in the fore-

man's being inundated with unnecessary detail which leaves him no time to consider broader issues. He is struggling to keep up with a mass of routine duties instead of being ahead of them, planning and guiding departmental procedure. In consequence, he is too narrow in his outlook, and is concerned only with his own department, and frequently only with the lesser details concerning it. To make decisions and to take action only as it affects a particular department rather than in the interests of the company as a whole, is a distinct drawback. This weakness, at root, is often to be attributed partly to lack of knowledge, and partly to the inability of the foreman to delegate responsibility, and implies that he is imbued with the idea of making himself indispensable and thus irreplaceable.

(b) Too Independent

Since the foreman's chief concern is naturally to retain and fortify his own position, there is a consequent tendency for him to show too much independence. His authority in the workshop must be indisputable, and this authority must of necessity be accompanied by a certain attitude of independence. Where the management does not assure or support the foreman's status, he tries to do this himself by being secretive about records and information. Then, too, where there is no close daily collaboration between management and foremen, so that the latter are left largely to their own devices, there springs up a type of independence which resents advice or guidance. The foreman, either by reason of undue interference, gross neglect, or unsuitable upbringing fails to co-operate with the management, other foremen, and his subordinates.

(c) Too Conservative

It is understandable that where a foreman fails to delegate duties properly, becomes involved in detail, and is always working under pressure, he will resent any change which may seem to require additional effort. He prefers the comparative certainty and security of continuous routine and shuns any proposal which calls for special attention. He is more willing to carry on the routine work of a department without change than to build up its productive capacity or its teamwork. Failure to develop and improve is a serious shortcoming; but more than this, the resist-

ance to change is commonly accompanied by slowness to take action, even on actual instructions. Departmental efficiency can only be maintained by vigilant attention to operating details, to make sure that stipulated quality and quantity, priority and cost are being maintained. It necessitates, too, the determination to avoid waste, and to prevent errors by new and better methods. Few workshops are engaged entirely on routine repetition work, so that conservatism in the adoption of new or improved methods also implies inadequate control over, and insufficient ingenuity used in, the carrying out of fresh jobs.

(d) Fails to Plan Ahead

A good foreman can foresee future eventualities, and takes steps to prepare for them. Failure to do this can be attributed to inability to delegate work and to a preference for improvisation rather than for organisation. There can be no proper planning without adequate preparation before performance begins. This means thinking out future requirements in materials, machines, tools and labour, and then giving the necessary instructions for everything to be available at the work point ready for operations to commence. The old conception of the foreman's duties was simply that men had to be kept at work and that they must not be allowed to waste time, whereas the new view is that the foreman should not waste the time of his men through insufficient and inefficient planning. Improvisation as a set routine of supervision is associated with slap-dash or rule-of-thumb methods, and it implies an absence of the thoroughness which distinguishes the competent and far-sighted foreman. Where no evidence of preplanning exists, it will be found that labour, materials and plant are being used uneconomically.

It will be found, too, that the foreman who cannot plan ahead does not understand the purpose of control records, cannot make use of them, and consequently affirms a determined dislike of them.

(e) Controls Labour Unwisely

The foreman's control of labour is subject to criticism on many grounds and from various sources. The management may object to the foreman's retaining too many employees to "come and go" on; or they may be dissatisfied with the degree of labour turnover—either the foreman is always changing his staff, or

engages too many unsuitable workers. Other criticism to which the foreman is subject from his superiors is the manner of his control over employees—either he is too strict, causing trade union disputes thereby, or he is too easy-going and, for the sake of peace and quiet, gives in too readily to workers' requests. Another serious cause for dissatisfaction is the relatively poor personal influence which may be exercised by the foreman over his operatives, with consequent lack of teamwork and proper understanding, so that departmental resistance to change is higher than it need be, and the susceptibility to disputes greater than is justified. Workers, too, may complain that their instructions are insufficient or obscure, that the foreman will not explain new policies or listen to grievances, and in general terms, that the supervisor is not understood and will not try to understand. It is not only what the foreman does, but the way in which he does it, that irritates so many workpeople. Instead of preparing employees for changes in instructions by giving a clear explanation and selling the advantages, there is too much abuse of authority by adopting a "like-it-orlump-it" attitude with complete disregard of individual circumstances or personal reception, and of whether this may lead to discontent, dismissal, or voluntary resignation.

20. The Foreman Himself

Success in supervision depends in the main on the foreman himself. Once he is appointed, it is up to him to get results. He must show that he is capable not only of doing the job he is appointed to do, but he must also prove that he is entitled to greater responsibility and higher pay. The foreman's wages, which is the company's departmental cost of supervision, is to be regarded more as an investment than as an unavoidable non-productive oncost. Supervisory remuneration, which after all is largely instrumental in attracting men to its responsibilities as well as in making them contented, competent, and competitive in the execution of those duties, should be largely dependent on results obtained. Where results are good, a firm ought to be prepared and willing to invest more in assets which have proved, and will continue to prove, their earning capacity.

The degree of success achieved by the foreman is measured by the results he obtains. Successful supervision is not accidental. Results do not occur by chance. The foreman must employ

sound, suitable, and satisfactory methods. An occasional brainwave, one or two suggestions, or an unusual stroke of luck may be responsible for securing his appointment; but successful supervision depends on the sum total of results arising from innumerable decisions taken in the day-to-day operation of his department. It is the consistently high level of daily performance which distinguishes the good foreman.

Supervision calls for a high standard of general ability with a commensurate degree of intelligence, maturity of character, and a temperament suited to control of the workshop. The foreman must know his job thoroughly, and must be fully acquainted with the technical processes and the details of routine. He must be respected for his general competence and soundness of judgment. He must be fair, straightforward, and consistent. He must be acutely aware at all times exactly how jobs stand and what his men are doing. With an intimate knowledge of both plant and personnel capacity, he should be able to use both time and material to the fullest advantage. Commendation and criticism should be administered impartially, but adapted to individual peculiarities.

The foreman must be prepared to accept full responsibility for his department; to transmit accurately the company's policy; to delegate duties soundly; and to develop departmental teamwork. He should be prepared to subjugate personal interests, both his own and his workpeople's, to the demands of the job to be done, and to the interests of the department as a whole, and of the company. The good foreman should explain instructions, teach newcomers, and train experienced men to greater levels of competence. Apart from making himself understood, he should also understand his operatives and deal with, or transmit to higher authority, any complaints or grievances regarded as sufficiently serious for that step. In the midst of all these details, the successful supervisor must maintain a determined purpose and a definite policy. Finally, he is expected to lead by example, display sound judgment, show initiative in overcoming obstacles, work amicably with those with whom he comes in contact, be alive to the relative importance of current problems and deal with these soundly, completely, and promptly.

21. The Foreman and the Management

Success in supervision, although due primarily to the ability and character of the foreman himself, can, in fact, be greatly

affected by the influence exercised by the management. In supervision, as in other matters, nothing succeeds like success. Where the foreman is competent and gets good results in carrying out the company's policy, relations with the management are usually satisfactory. Where, however, affairs in the workshop give rise to dissatisfaction, the root of the matter may be found to lie outside the actual operation of the department. The responsibility of management for successful supervision rests:

- (a) In providing a sound practical policy;
- (b) In issuing clear accurate instructions;
- (c) In ensuring that the management's plans, policies and intentions are fully understood by the foreman;
- (d) In being prepared to consider suggestions and discuss practical difficulties in operation;
- (e) In prescribing the scope of authority, degree of responsibility, and nature of duties imposed on the foreman;
- (f) In recognising and maintaining, by privileges and other means, the status and the authority of the supervisor;
- (g) In basing commendation and criticism of the foreman on carefully determined facts, and in dealing with these in private;
- (h) In placing confidence in, and collaborating with, supervisors so as to create and maintain a high standard of executive teamwork;
- (i) In providing or encouraging the collection of all the necessary information to facilitate departmental control;
- (j) In stimulating, by training, better supervisory performance, and rewarding by promotion, financially or otherwise, meritorious results.

22. The Foreman and the Operatives

The third group of factors which decide for or against success in supervision concerns the nature of the foreman's influence over the operatives. Many otherwise good executives fail because of their inability to understand human nature, and are consequently unable to exercise that personal influence which accounts for creditable results. The general behaviour of the foreman is constantly subject to comment or criticism by those receiving orders from him, and the general estimation of his worth in the workshop rises or falls accordingly.

Operatives do not expect a foreman to be popular in the social sense, but they demand, as a right, fair and straightforward treatment. They feel entitled to clear explanation of instructions. Although working in a group and subject to impartial supervision, they object to being ignored or treated as machines, and seek recognition as individuals, to be either commended or criticised on the results of their efforts. While appreciating that the foreman is usually working under pressure, operatives expect him to show some understanding of them and of their work problems. A foreman is accepted by the working force when he is prepared to listen sympathetically to complaints; when he shows concern as to their working conditions; and when he is prepared to present their petitions to the management. It is not so much the things the foreman says or does which matter most, but how he does them and the way he puts them over.

The foreman is primarily responsible for industrial relations in the workshop, and the measure of success is determined by consistent and commendable results obtained over long periods, which imply the absence of hostility and the avoidance of friction. To be a good foreman is—to be liked without necessarily being popular; to be respected and not feared; to lead and not to drive; to be energetic without being aggressive; to progress consistently rather than to advance by fits and starts; to be logical and not unbalanced; to listen to complaints without being imposed upon; to be neither a "yes-man" nor a "no-man"; to be impartial yet not impersonal; to stimulate and not to discourage—these are the aims the achievement of which contributes greatly towards efficient supervision.

23. The Foreman and the Customer

The company's customers represent the fourth group of interests with which the foreman is directly or indirectly associated. It was perhaps at one time a widespread and common complaint by management that departmental foremen were only remotely concerned with sales and not only uninterested in, but often positively antagonistic towards, selling activities and interests. Arising no doubt in large manufacturing companies where collaboration between sales and production was almost non-existent, it was widely but falsely believed that wages were paid from the employer's inexhaustible pocket.

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The broadening of outlook generally, and particularly among foremen and other production executives, has brought about a more common awareness as to the importance and influence of the customer in providing work and paying wages. Attention is now being focused on the customer and his needs. Promptness of delivery plays an important part in many trades in deciding the volume of orders to be expected. Quality of workmanship must also be regarded from the customer's point of view, so that dissatisfaction may be avoided by rigid inspection and keen maintenance of established standards of workmanship.

The foreman is expected to show awareness of the customer's importance, that complaints are investigated and dealt with in such a way as to give satisfaction, so as not only to retain trade but to build up business. The treatment of customers' enquiries and requirements should, if referred direct to the foreman, receive that attention and concern that the company or its sales staff would wish to be shown. A foreman's determination to satisfy customers should include not only a willingness to correct errors and accept responsibility where necessary, but also the introduction of methods to avoid the recurrence of mistakes. It is essential that the foreman have an acute appreciation of the company's dependence on customer satisfaction, and this implies a clear understanding of the importance of maintaining quality, honouring delivery promises, and attending to detailed requirements from the customer's point of view.

24. The Foreman and the Shareholder

If the foreman is to regard the management of his department as though it were a business within a business, then it is essential that he should recognise the importance and maintain the interests of the shareholders. As a fifth group of interests to be accepted and furthered as part of the responsibility included in his job, the foreman must regard property from the viewpoint of ownership. The value of land, buildings, plant, tools, and equipment must be safeguarded and preserved by insisting on proper treatment and adequate maintenance. The foreman has no right to allow property to be damaged or reduced in value, whether this arises wilfully or by neglect.

When the foreman takes an ownership view of his department he is not likely to recommend the spending of money on alterations,

or the incurring of expense in the modification of plant, unless entirely justified. Due consideration for ownership also makes the foreman acutely conscious of all wastes in time and material, so that he becomes all the more insistent on vigilant economy. Scope for saving also occurs in all services such as steam, heat, light, power, water, etc. Perhaps in no other field of interests is there so much opportunity for making improvements, increasing assets, and reducing costs as in this matter of the interests of shareholders.

25. His Relationship with Other Foremen

The last group of interests with which the foreman is comcerned is his association with colleagues of similar rank. Not only is it necessary for the foreman to be watchful of the interests of the management and shareholders, to control competently his influence over operatives and connection with customers, but also, and in his own interests particularly, to establish friendly relations with other foremen. Not only is the foreman's own status improved by close collaboration with colleagues, but by maintaining a helpful attitude he himself can receive many benefits. Even where systems of prior advice exist to prepare foremen for jobs coming forward, close contact with the foremen of the departments concerned can greatly facilitate the smooth flow of work. One common fault which can be avoided by a proper understanding with other foremen is the tendency, often unconscious, to interfere with the interests of other departments. Criticism of workpeople in other workshops, or unfavourable and irresponsible comment on jobs done there, lead to interdepartmental friction. Collaboration and co-operation must first be evident among the foremen themselves before it can be expected within departments. One of the chief obstacles to co-ordination is the reluctance of foremen to accept responsibility, and possibly blame, with an all too frequent effort to "pass the buck". When foremen view their responsibilities in the light of the interests of the whole company, instead of regarding them as being confined to the concerns of watertight departments, then interdepartmental friction will be replaced by interdependent collaboration.

26. The Foreman's Responsibilities

It is to be seen that the responsibilities of the foreman bring him into contact with four main groups of interests, apart from

his own. Each of these groups of interests plays its own important part on success in supervision. The foreman must be able fully to recognise those interests surrounding him and regard their satisfaction as his responsibility. Where interests appear to be in conflict, as frequently they are, a solution is to be found either by practical compromise or by recognition of the relative importance of the interests affected.

THE FOREMAN'S RESPONSIBILITIES

A. To Management

- 1. Carry out precisely policies and instructions issued;
- 2. Improve working methods and make suggestions;
- 3. Control quality, quantity, service, and costs of production;
- 4. Enhance company's reputation with labour and customers.

B. To Operatives

- 1. Delegate responsibilities and assign duties fairly, clearly, and accurately;
- 2. Instruct, train, encourage, and lead employees;
- 3. Present to the proper quarter, or deal with, justified complaints and grievances;
- 4. Stimulate incentives and teamwork;
- 5. Insist on safe and satisfactory working conditions.

C. To Customers

- 1. Ensure promptness of delivery;
- 2. Maintain established quality;
- 3. Investigate and deal with customer complaints;
- 4. Avoid errors and complaints arising.

D. To Shareholders

- 1. Preserve land, buildings, plant, and equipment;
- 2. Prevent waste of materials and time;
- 3. Save heat, light, power, and other services;
- 4. Improve asset values by proper maintenance.

E. To Other Foremen

- 1. Maintain friendly and helpful working relations;
- 2. Preserve flow of work to and from other departments;
- 3. Desist from, and resist any, interference between departments;
- 4. Admit responsibility and avoid friction.

27. The Foreman's Duties

The scope and nature of the foreman's duties vary considerably from company to company. Generally speaking, in large companies the designation of foreman is often reserved for high-grade executives responsible perhaps for three or four workshops, having supervisors, charge-hands and section-leaders under him. In other concerns, usually companies small in size, the person in charge of a relatively small workshop is designated working-foreman or, in other words, a leading workman. It is common to find foremen in some concerns with greater responsibility and more experience than managers in smaller companies.

The extent of the foreman's duties is *first* determined by the rank he holds, by his experience, and by his competence.

Secondly, and closely associated with rank, the exact duties of the foreman depend on the responsibility and authority assigned to him. Responsibility ranges from the purely routine supervision of a set of processes to work requiring a high degree of initiative and individual decision.

Thirdly, the size and character of the organisation and the extent to which assistance is rendered by functional specialists such as Employment, Purchasing, Planning, Costing, and so on, greatly affect the scope and nature of the foreman's duties.

Fourthly, the type of technical processes and the amount of detailed control exercised over them by the foreman also affect the range of his duties. If the processes are of such a nature as to require close attention to detail at every stage of manufacture, involving inspection and the determination of machines and methods to be employed as production proceeds, then supervision becomes largely technical. Generally, the lower the grade of foreman the more intimately is he connected with technical processes, and the higher his rank the more is he required to plan and control labour, machines, and materials.

Fifthly, the type of production greatly influences the duties of the foreman, for apart from the technical nature of the work, a continuous flow of similar output differs greatly from intermittent or individual jobs or batch production.

Finally, the foreman's duties are to some extent determined by the character of the working force and whether this consists chiefly of old and experienced, or young and untrained, workpeople; whether the staff is skilled, semi-skilled, or unskilled; whether

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the class of labour consists of male or female workers or both; and the general state of industrial relations prevailing.

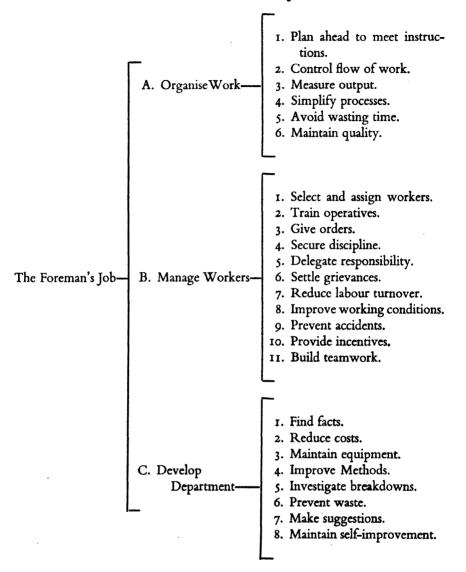
The duties of the foreman are determined largely by separate consideration of each of the circumstances surrounding each case. Apart from rank, which decides the relative importance of the foreman's status, his job can range from the one extreme of a small number of highly specialised duties with much scope, to the other extreme of many duties in a relatively limited sphere. He may exercise general control or detailed inspection; and he may be concerned largely with labour or chiefly with processes.

However, throughout the whole of these wide variations in practice, it can be stated that as the rank of the foreman rises from that of leading workman to that of superintendent, the proportion of his time and the nature of his duties should progressively become less technical and more executive. Whereas, as a section-leader, 90 per cent of his time and duties may be confined to the intricacies of manufacture and 10 per cent to control of output, the foreman of superintendent's rank may spend 90 per cent of his time on control and 10 per cent on technical matters.

Apart from the amount of attention given to process matters becoming less as the foreman's rank and responsibility increase, the modern tendency is to lay greater stress on direction and control even at the expense of certain features connected with manufacturing detail. The aim of this movement towards greater executive ability is to free the foreman from purely manual operations and undue concern over minor process details so as to enable him to exercise greater influence on organisation and management, where he is likely to render more valuable service. It must be accepted that manufacturing details, such as features of design and standards of inspection, are matters peculiar to specific trades, which are outside the general consideration of foremanship. Omitting for this reason the duties determined separately and confined to manufacturing processes connected with the product, the foreman's non-technical duties, ranging from 10 per cent in the lowest grades to 90 per cent in the higher grades, consist of three main functions, viz. Organise Work; Manage Workers; and Develop Department. Each of these three main functions comprises a number of duties which are set out in chart form.

This chart presents a formidable list of duties, especially when it is remembered that those purely technical aspects of processing,

THE FOREMAN'S JOB



which the foreman is called upon to direct, have been omitted. A full appreciation of the importance of, and the amount of work involved in, the proper execution of these duties indicates the limited attention each can receive. It would appear impossible for the foreman to handle completely and competently the many phases of his work, and for this reason it is necessary that he should delegate to subordinates the least important duties on the one hand, and that, on the other, he should be relieved of the work

best done by specialists. One of the chief dangers in the assignment of duties to the foreman is to overload him with work, often of an unnecessarily elementary and detailed character. Sometimes, as the result of one error occurring or one job going wrong, the foreman is given further detailed work to do, either manually himself or by complete inspection of every job. A succession of various kinds of errors dealt with in this way soon, by accumulation, lowers the value of the foreman's time, restricts his outlook, reduces the scope for initiative and other executive work and makes a man already overharassed take less interest in his job. It follows that the foreman's job should periodically come under review so that routine duties temporarily imposed, possibly impetuously following a more or less serious blunder, should be removed rather than allowed to remain. In the reconstruction of the foreman's responsibility, it must be borne in mind that the more time devoted to work of a technical and organising character, the less time is available for the management of men and the development of the department.

The amount of detailed attention it is necessary for the foreman to give to each duty is determined largely by the existence of, and the degree of assistance given by, functional departments. For instance, in large companies it is common to centralise technical control, purchasing, production, planning and progress, engagement, training, time study and wage incentives, cost control, and inspection. Practice varies, and depends to some extent on the persons in charge of functional and departmental supervision, but the purpose of specialists is to provide and control the machinery for facilitating the foreman's influence in the workshop. Of great importance is the need not to undermine, either in fact or by implication, the authority of executives, whether functional specialists or foremen. For this reason it is essential that positive collaboration be established. There must be mutual understanding between the foreman and the executives controlling certain aspects of workshop operation. For instance, the labour manager might adopt the following line of approach with foremen:

- (a) Recognise the great personal influence of the foreman on operatives in day-to-day contacts;
- (b) Consult the foreman, rather than dictate to him;

- (c) Discuss with the foreman before, rather than after, proposed changes are put into effect;
- (d) Acquaint foremen in conferences with the company's current personnel policy, to ensure understanding and uniform application of that policy;
- (e) Provide information and make suggestions for the improvement of departmental absenteeism, turnover, and other matters which help in control;
- (f) Develop the status and authority of the foreman and avoid undermining his influence by supporting his subordinates against him.

The foreman, for his part, should have a proper understanding of his position and authority as affected by the production manager, labour manager, and so on. It is necessary also for the foreman to appreciate fully the policies, plans, and principles employed by centralised departments, so that the arrangements prescribed can be closely supervised in day-to-day operation where no special provision to this end has been made. Centralised functional control should be viewed as assisting the foreman and facilitating the better control of his department.

Turning for example to that duty which has been designated "Select and assign workers", it is obvious that although the foreman may not actually interview all the applicants available, he should be able to provide a precise statement or specification as to his requirements. When a suitable person is found he may, as is common in companies of moderate size, see the applicant before appointment. In any case, even if the new worker is sent along in response to a request, the foreman still has to assign the person to a suitable job and to re-assign when necessary. Another aspect of the foreman's duty of selection occurs when a reduction of staff is made and workpeople must be transferred or dismissed. Although the foreman may not carry out in detail the duties listed, he should be acquainted with the company policy and operating principles in regard to them so that these measures are not frustrated in practice through inexperience incapacity.

The foreman's duties are also presented under the main classes of work involved—Quality, Output, Service, Staff, and Costs.

THE FOREMAN'S DUTIES

A. Quality. Ensure customer satisfaction;
Raise quality of workmanship;
Eliminate errors and spoiled work;
Establish standard of performance;
Maintain adequate inspection;
Enhance company's reputation.

B. Quantity. Eliminate unnecessary processes;
Simplify methods of production;
Prevent waiting time;
Provide adequate incentives;
Measure individual performance.

C. Service. Plan ahead;

Determine priority schedules;

Ensure adequate supplies;

Regulate working hours;

Stimulate flow of work;

Maintain plant and equipment;

Prevent breakdowns, obstructions, congestions.

D. Staff. Maintain suitable and sufficient working force;
Select suitable workers;
Place right man in right job;
Train operatives;
Establish congenial working conditions;
Reduce labour turnover and absenteeism;
Prevent accidents:

Provide promotional possibilities; Instil discipline.

E. Cost. Avoid waste of materials;

Maintain accurate records;

Minimise use of heat, light, and power services;

Ensure machine utilisation;

Prevent unnecessary overtime and labour costs;

Control wage payment.

It is most important that the foreman understand, both in general terms and in concrete details, the functions, responsibilities, and duties which his job involves, and thereby appreciate what is expected of him. Organisation in industry has developed to such

an extent that it is possible to state fairly precisely what is wanted from foremen, irrespective of rank:

- (a) The job to be done and the interests of the company must at all times take precedence over the personal interests of individuals.
- (b) The foreman should regard his department as he would if it were his own business, to be operated in the best interests of permanent and effective results.

(c) The detailed procedures of a department must conform to the general policies of the company.

(d) The foreman must delegate duties and direct the efforts of others, and not himself engage unnecessarily in manual work or duties of relatively small importance.

(e) The supervision of a department should display discipline, impartiality, incentive, and teamwork.

(f) The department should be so organised as to show purpose, permanency, stability, flexibility, balance, progressiveness, planning, operating efficiency, orderliness, and harmony.

(g) The foreman should have general ability and a broad outlook rather than narrow and intensive technical knowledge or skill, with the corresponding viewpoint of the specialist.

(h) A high degree of executive competence should be evident to ensure the thorough, complete, and prompt handling of essential details.

(i) There should be full appreciation of the customer's requirements, and willingness to provide service and expedite deliveries promised or expected.

(j) The foreman should understand human nature and be able to encourage employees, collaborate with other foremen, and co-operate with the management.

(k) The foreman should be able to make, and be willing to receive, suggestions, so that the department can improve continuously by being receptive of, and adaptable to, changes.

(1) Successful supervision is determined by the ability of the foreman to get the best possible results with the plant, equipment, materials, and men available; to know what is going on in his own department; to accept full re-

sponsibility for mistakes and to profit by them; and to strive constructively for better performance in his department and in himself.

To conclude, an example is given of how the requirements of the foreman and his job can be put into practical effect by quoting a statement issued to its foremen by a well-known food manufacturing company:

REQUIREMENTS OF A GOOD SUPERVISOR Specification

- 1. He must direct his workers to produce the highest quality work with maximum efficiency. Every detail cannot be perfect at all times, but wisdom and skill is expected in the conduct of his work so that the general standard of performance is high.
- 2. He must be able to develop and train his men with respect to skill, co-operation, loyalty and good citizenship. Sane, constructive criticism should be welcomed and respected in his group. In other words, the supervisor should be a teacher whose influence tends to make his workers better men and better citizens.
- 3. He must promote friendly relationships. This is the basis of efficiency in all organisations. It includes intelligent, helpful relationships with subordinates, superiors, other departments, customers, and the public.

To perform these duties successfully the supervisor must possess such qualifications as the following:

- (a) Complete knowledge of the job he is directing. This includes practical knowledge from having done the work, and theoretical knowledge from having studied the technical aspects.
- (b) Leadership. This means tact and force in inspiring others to unite in the common purpose and to exert maximum efficiency in its accomplishment. The test of true leadership is whether the supervisor, day in and day out, can get a first-class job in minimum time per unit with his workers taking pride in their accomplishment and admiring their "boss".

- (c) Co-operation. This means group-mindedness of a kind which causes him to join enthusiastically with others in the work of his group, department, and the plant as a whole.
- (d) Scholarly Interest. Appreciation of the broader aims of the business; also a never-failing interest in new improvements and developments. He should be able to look on these impartially and be willing to give them a fair trial. Though many new ideas are eventually discredited, this policy is the only method which can bring maximum progress.
- (e) High Moral Standards. This means setting a good example for the workers by his own personal conduct. This should be that characteristic of a gentleman. When drastic action becomes necessary it should be taken promptly in a straightforward manner which suits the needs of the occasion, without unnecessary show or disturbance. In general the supervisor's conduct should tend to create and maintain a fine sense of fellowship among the men under his jurisdiction and should promote the highest ethical standards in his organisation.

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SECTION IV

THE SELECTION OF FOREMEN

28. Better Supervision

The selection of staff depends on the job to be done, on the general idea as to how it should be done, and on determining the type of person best suited to doing it. Where the foreman's job has changed from being almost entirely technical to being largely executive; from dealing chiefly with materials and machines to being concerned more with methods and men; and where the general ideas of execution have altered with the change from the old to the new foremanship, it naturally follows that different types of men, with new outlook and modern training, are now required. Apart from these fundamental changes, which have already been described, far-reaching changes are taking place in managerial views as to the value of executive and subordinate staff. Managements as well as foremen are concentrating more on man-power and methods, with the result that competent staff is now regarded as a real asset and a valuable addition to goodwill. The crude view that the only business assets worthy of consideration are buildings and machines is giving place to the modern view that competent and experienced men are as important to profit-making as suitable material and equipment.

Commencing with the introduction of more competent and better qualified managers, it was soon realised that the modern methods proposed as a result of this either could not be used at all, or could only be employed partially, because of the incapacity of subordinates to appreciate the significance of better systems, and to use and make the most of the improved tools provided. The endeavour of modern management to stimulate individual initiative and intelligent adaptability is often curtailed abruptly by the incapacity of subordinate executives to think for themselves. It was frequently believed in the past that once suitable buildings and plant were provided, acceptable profits naturally followed. Where this did not take place, managers were changed until liquidation or success ensued. After some experience, often very costly, it became more commonly accepted that business success

was in large measure due to management, and at the present day it is realised that this discovery is equally applicable to foremen and experienced operatives. It has always been accepted that one of the chief qualities of the successful business man lies in his ability to select and direct subordinates.

Another feature of modern management is the view taken in regard to staff and labour turnover. In the past, as the result of placing only nominal value on man-power as compared with buildings, plant and equipment, staff were engaged and discharged with little hesitation, and labour turnover was, in fact, regarded as a healthy sign of lively management. To-day, on the contrary, a high percentage of staff turnover is considered as a sign either of poor selection or of poor powers of retention. In contradistinction to the ideas and policies of the past, it is now considered one of the main responsibilities of management that competent executives should be sought, selected, trained, and retained, as part of major policy in building up effective company teamwork. Proficient production both in quality and quantity is best assured by the acquisition and accumulation of experienced and competent personnel. In addition to the assets of buildings and plant, companies possess in their staff a hidden asset—a sort of secret reserve —which can either be improved by replacement and stimulation, or dissipated by neglect and obstruction.

29. Staff an Asset

Sound selection is also influenced by the present tendency to regard staff as an investment. Compared with an attractive product and sufficient capital, an efficient staff is important, for whereas the former can be improved by good management, the best products and ample capital reserves cannot be turned to profitable account by poor management. Selection of methods, purchase of machinery, choice of products, quality of workmanship, quantity of output, cost of production, and the degree of development, are determined largely by management, which becomes the central pivot of operation and one of the chief factors responsible for final results. Management is thus to be regarded as a good investment. Foremanship, too, is an asset, the value of which is determined by its capacity to get results. It is not the wages paid to the foreman which matter so much as the earning capacity of the investment. This view stands in sharp contrast to the older and more common

conviction that supervision is a necessary evil and an unproductive oncost. Where sound policy is placed before perfect plant, and good management and proficient foremanship before first-class equipment, it follows that a company's assets lie first and foremost in the proficiency of its personnel.

It has been shown also that sound organisation exists where a large measure of collaboration is evident in the executive. One of the general considerations in the selection of staff is to ensure that those chosen, apart from the merits of each as an individual worker, possess the capacity to work with those already established. Teamwork, which is one of the clearest indications of good organisation, is based on each foreman not only supervising his own department but helping, and in turn being helped by, other foremen and staff executives. As a general consideration in the selection of a foreman, it should be ascertained that in addition to technical and organising proficiency, he should have, first, a favourable and satisfactory personal influence over subordinates; second, a capacity for co-operation with colleagues; and third, a temperament suited to collaboration with those of superior rank.

A further general consideration which has gained ground in recent years, and is likely to be increasingly important in the future, is the promotional prospects of the foreman to be selected. As companies find it necessary to concentrate on development as the means of continued profit, it becomes all the more necessary to select those persons who can improve and develop with the expanding business. While it is advisable to avoid appointing persons whose general ability and qualifications are too far in advance of the requirements of the job, for fear of causing early and permanent disappointment, it is necessary to select persons who possess progressive aspirations and capability. Accordingly, foremen should be selected from those who, realising their present ability, appreciate also the scope and the need for improvement in their executive capacity. Selection may in this way be confined to those who not only accept the need for training and appreciate the value of guidance, but who also want to improve their position, and are willing to work for promotion and recognition.

A sound case can be made out for regarding personnel in the same way as other business assets, and so subject to regular review. An evident need exists for a periodic personnel audit as well as the annual audit of accounts. As depreciating assets are given

a written down value, so, in a foremanship audit, those who slip back or fail to come up to reasonable expectations should be subject to review and, according to circumstances, liable to demotion or to be transferred and trained. Similarly, those who, during the period under consideration, have shown advancement ought to be subject to commendation and, where justified and practicable, given suitable compensation. It follows that if judgment as to performance can be supported by records of results compared with carefully prepared and mutually well-understood budgets, so much the better. The foremanship audit has a good deal to commend it:

- (a) The foreman knows where he stands;
- (b) He has a fair idea of his superior's opinion of his capacity;
- (c) An examination is likely to lead to a reliable evaluation of his efforts, in accordance with which he will be rewarded or otherwise;
- (d) The periodic review provides an opportunity to offer explanations, remove misunderstandings, and mutually appreciate existing problems;
- (e) Plans and policies for the ensuing period can be discussed with a view to departmental and supervisory development.

To follow the annual audit of financial books with a review of business procedures and the revaluation of personnel proficiency, provides a suitable occasion, which after the first year becomes established and expected, for promoting and demoting existing foremen, and for selecting from outside or up-grading from within those with promotional prospects and valid claims.

30. Qualifications for Foremanship

In the selection of the new foreman, let it not be thought that requirements are being set down for ideal persons who, if they did exist, would certainly not be content with a foreman's job. The purpose of outlining the qualities to be looked for in a foreman is to lay stress on certain characteristics which are frequently given either only passing attention or are disregarded altogether. Emphasis should be placed on the type of person to be selected. For instance, whereas the old foreman was selected chiefly on the basis of technical skill, long experience, and substantial service, the new foreman is to be selected more on the grounds of general ability for supervision. The tendency is to select more with

a view to the future than with regard for the past: technical skill comes second to supervisory qualities; and actual experience is of concern chiefly in indicating training possibilities. Without embarking on complicated and often misleading ratings by assessing percentage marks to various qualities, the following lists attempt, by ranking requirements in order of importance, to show the differing specifications required, and the differing viewpoints taken, in the selection of the old and the new foreman:

Old Foreman

- 1. Technical skill;
- 2. Experience and service;
- 3. Disciplinarian qualities;
- 4. High standards of workman-ship;
- 5. Aggressiveness and perseverence;
- 6. Judgment;
- 7. Initiative and self-reliance;
- 8. Integrity and sincerity;
- 9. Health.

New Foreman

- 1. Executive ability;
- 2. Sense of organisation;
- 3. Managerial qualities;
- 4. Ability to train;
- 5. Promotional potentialities;
- 6. Intelligence and education;
- 7. Experience and technical skill;
- 8. Energy and general health;
- 9. Temperament.

The general outline is made with the natural proviso that as each foreman is selected primarily for a specific job, circumstances may alter cases, but the grounds of selection are in general to be found grouped in one or other of these lists.

EXECUTIVE ABILITY. The selection of supervisors from any group of candidates available must necessarily proceed from the review of general suitability to a particular examination of detailed qualifications. It is first necessary that the person selected should be generally suitable for supervisory responsibility and for executive control. The specific nature of the work to be done and the type of persons to be supervised must have primary consideration and must be borne constantly in mind. For instance, the choice between a male and female supervisor, which in some cases is obvious, is in many others subject to careful consideration and assessment. Although a woman would only in exceptional cases be placed over a department consisting entirely of men, it is an open question whether a man or a woman is better suited for a department consisting entirely of female labour.

Supervisory ability implies the desire for, and the capacity to

take, personal responsibility. Foremanship carries the authority to get things done by issuing instructions in such a way as to be instantly, implicitly, intelligently, and accurately executed with willing endeavour and without resentment. The foreman must know what is wanted and express his intentions in a clear, simple, and straightforward manner. He must be positive and persuasive. He must be capable of a good influence over subordinates in order that results may be achieved through individual stimulation and guidance as distinct from the employment of threatening and aggressive methods. The person in authority, irrespective of age, must be mentally and temperamentally mature so as to ensure a consistent attitude of judgment and common sense.

It is not only necessary that the foreman of a department be competent and qualified, but that his subordinates recognise and accept him as such. The outward signs of good foremanship evident to the operative are:

- (a) A sound indication of thorough supervisory attributes (for the worker desires in his superior steady consistence);
- (b) Firm control of temper;
- (c) Consideration for subordinates;
- . (d) Fairness and impartiality of treatment;
 - (e) Capacity for accepting personal responsibility;
 - (f) The assertion of authority by implication rather than by forceful imposition;
 - (g) The use, instead of the abuse, of authority.

The operative does not respect the merely popular and friendly foreman but the one who knows how much work should be done and the best way of doing it, and who can commend or condemn individuals accordingly. While the foreman should be capable of encouraging good workmanship and of stimulating high production, it is necessary also that he be personally likeable rather than popular, and fully acceptable to his subordinates rather than disliked by them.

Sense of Organisation. After deciding the question of general and personal suitability for supervisory work, it is necessary to decide whether the prospective foreman possesses that degree of organising ability required by the size and system of the company, and by the scope for its use in the department concerned. Organising ability fundamentally calls for an orderly mind and methodical habits of work. The person organising must possess

a sense of proportion in order to discriminate between the fundamental and the trivial, and between the general and the particular.

A preference is to be expressed for that type of person capable of, and having a predilection for, investigating causes as a preliminary to action. Modern methods of control demand the foreman who goes to the root of problems and seeks to set them right by removing the causes, rather than that type of foreman who either jumps to conclusions or concentrates only on correcting individual mistakes. It is further required that the type of foreman to be selected should possess powers of planning ahead. A considerable saving in both time and money can be made by the person who can foresee, and prepare to avoid, difficulties before they arise.

Another important quality to be sought is the capacity to assign duties, delegate authority, and check up results. This calls for the ability to separate jobs into process sequences and to arrange for their uninterrupted and progressive flow, so that labour is utilised effectively, and so that individual responsibility for performance, both in quality and quantity, is self-evident.

In selecting a new foreman, care should be taken to avoid the man who is himself a good manual worker but who is without the ability to impart his knowledge or to direct the efforts of his subordinates. Organising capacity not only imposes the authority to give orders, but implies the responsibility for seeing that they are correctly carried out. A right regard should be held for quality of workmanship and its standardisation, and this should stand in proper relation to those allowances in time and material permitted by cost requirements. The foreman must be customer-conscious and must possess the right outlook on the general business policies decided by the company. Wherever possible, sound knowledge of the principles of production, methods of organisation, and systems of operation is to be desired, and in addition to knowledge of the underlying rules for organising, the ability to put them into practical effect within the department.

MANAGERIAL QUALITIES. As distinct from the ability to organise, which implies a capacity to investigate, plan ahead, and arrange in logical sequence equipment, jobs and duties, it is necessary also for the foreman to manage a workshop, and this means putting into effect those rules and methods carefully devised beforehand. Above all, managerial ability signifies a thorough understanding of human nature. The foreman should be able to assess accurately the

ability of his operatives, their potentialities, and their limitations. The new foremanship stresses the need for as intimate a knowledge of men and methods as of machines and materials. For this reason, the foreman must be able to control men in a craftsmanlike manner, just as the old foreman was able to handle materials with skilled competence.

The person in a position of authority must not only be able to do the manual work of his department, but must also see that others do it competently. A preference for manual work is a common weakness in foremen, and, where this occurs, the output and organisation of the department are likely to suffer in consequence. While ability to organise may render it undesirable for the foreman to participate unnecessarily in manual operations of the workshop, and may enable him to assure a sound assignment of duties, it lies with his managerial qualities to put these into practical effect:

The stimulation and encouragement of workpeople depend first and foremost on the favourable influence exercised over them by the foreman, who should therefore possess such qualities of temperament as form the basis of leadership and discipline. He must be able to adapt, and be himself adaptable. He should be stable and consistent; tolerant and sympathetic; patient and reasonable; determined and insistent; and practical and progressive. Successful supervision means getting the best possible results from a department over prolonged periods; and this involves knowing clearly what is expected and what can be obtained, measuring the actual attainment, and improving it where possible.

ABILITY TO TRAIN. Closely allied to those managerial qualities which are responsible for getting good results in practice, is the ability of the foreman to impart all his acquired knowledge and accumulated experience in order to help the operative in carrying out his job correctly and expeditiously. Many otherwise excellent foremen, who know the technical aspects of the job to be done, and are themselves capable craftsmen, fail because they do not, or are not able to, pass on their experience to other men. Even if the foreman himself is uncommunicative and unable to express his ideas in a clear, concise way, he should possess a conviction that training of operatives is essential and that it calls for special effort on his part and for particular qualifications.

Foremanship demands an open-mindedness which enables the person in authority to be both willing and able to teach, while at the

same time remaining teachable himself. The foremen should recognise the importance of, and to be willing to provide for, intensive instruction of operatives, and this applies both to new employees and to older workers taking up new jobs, as well as to those employees receiving new instructions in the course of their normal work. Preparing the operative for new instructions involves establishing that state of mind which permits maximum receptiveness. Each instruction should be accompanied by an explanation for processes and their sequence, so that the orders thereby are more easily understood and remembered. In this way, performance is carried out with more interest and greater intelligence. The foreman, as an instructor, should be able himself to undertake, or insist on some subordinate's undertaking, the four stages of training—explanation, demonstration, practice, and checking of progress.

Training must be viewed positively, the foreman insisting on taking the initiative with instruction, rather than passively, where he would persist in the belief that good operatives would train themselves by a process of trial and error. Naturally, the more convinced the supervisor is of the value of training as the best means to ensure high-level performance, the more he will insist on proper explanation of orders, clear instructions, and their precise execution. Comprehensive departmental training should include widespread instruction, so that workers are not only interchangeable but intelligently adaptable to the needs of the workshop. The onus of responsibility for training rests with the foreman, and such training should range from the detailed instructions of process to the general explanation of company policies as regards labour and working conditions.

PROMOTIONAL POTENTIALITIES. As a preliminary to the selection of foremen, it is necessary to determine the degree to which development in the department and in its supervisor is to be expected. Where expansion or improvement is likely to figure largely in the company's general, or in the department's particular, development, then the person to be selected should possess those qualities which facilitate both workshop and personal progress. Apart from the possession of latent qualities which might be aroused and stimulated under suitable guidance, it is necessary to have the ambition to improve in ability and position. Personal ambition must be associated with the drive and push which enable obstacles to be overcome, and with the power of persuasion which will

overcome the habitual and all too common resistance to change. Both forcefulness and aggressiveness must be evident in some measure if a person is going to improve himself, and a definite quality of determination is essential for departmental development.

Initiative and the power to supply ideas, suggestions, and solutions of a practical nature and in an acceptable form, are indispensable qualifications. Personal progress in industry calls for a developing sense of commercial values, an advancing common sense, and an improving soundness of judgment. Not only must the foreman know the technical details of his job, thoroughly understand the systems of operation, be able to detect weak spots, be on the constant look-out for errors, foresee obstacles and grievances, be customer-conscious and cost-conscious, but he must also be able to supervise his department in such a way as to secure better results and fit himself at the same time for an improved position. The foreman must not only be able to carry out instructions given to him, but must be able to suggest better methods.

To the person selecting a new foreman, the candidate should be considered for his promotional possibilities, which would determine whether he were likely to be an appreciating asset to the company's personnel. Here, the possible rate of the company's growth must be considered in conjunction with the promotion likely to be expected by the person selected.

INTELLIGENCE AND EDUCATION. As the character of the foreman's job has changed from being concerned chiefly with technical problems to being occupied more with general executive duties, it is no longer essential that he should be a highly specialised technician and skilled craftsman. It is, in fact, better otherwise if such qualifications prevent interest in supervisory problems. The demand to-day is for an informed practical man who can hold the balance, and deal impartially and competently with all normal problems that arise, whether they concern grievances from operatives, breakdowns in machinery, or complaints from customers. For this reason, there should exist a relatively high degree of industrial understanding and intelligence, so as to ensure continuous adaptability. There must be ready appreciation of workshop problems, both human and technical, so that causes can be sought and appropriate action taken promptly.

The standard of intelligence required in the foreman must be such as to secure understanding of, and to ensure being understood

by, employees in the workshop. He must be practical and must display sound common sense. He should be neither slow-witted nor possess intelligence too far in advance of those he seeks to supervise. To have the foundation of a sound general education can be of great benefit, especially if it widens the outlook and sets the man along those lines which enable him to think for himself. Yet, when so many facilities are available for self-training, the handicap of an inadequate formal and elementary education is not in itself an insuperable deterrent. After all, the supervisory requirements of industry are concerned with getting results and with future potentialities rather than with past achievements of an educational order.

The type of education which has proved most suitable is often to be obtained on technical subjects in evening classes where, in order to qualify technically, it is necessary to complete four or five years of part-time day or evening instruction, as with the course for the Higher National Certificate in Engineering. With such training the right type of mental equipment, thoroughly versed in the scientific method, is often discovered and fostered; and this, if supported by other personal qualifications necessary in the job, provides men suitable for supervisory positions. The selection of supervisors is based primarily, not on evidence of intelligence and sound education, but on the man's ability to apply intelligence and make practical use of education. Some indication of what a man has done to improve himself may be more revealing than what has been done for him by way of formal instruction.

EXPERIENCE AND TECHNICAL SKILL. Experience of industry can be misleading and easily over-estimated. The selection of a supervisor should be concerned not with a mere recital of experience he has already gained, but with his proven ability to profit from, and to apply, the results of such experience. Past experience has meaning only in so far as it indicates the nature of previous responsibilities and their discharge, and the bearing of these factors on future capacity; and their value can only be assessed by careful enquiry into the nature of previous work and the circumstances and manner in which it was carried out. Now, promotion from within the factory permits experience to be more accurately assessed, and with a view to prospective supervisory appointments, personnel reports on men who have spent periods as understudies can be both substantial and reliable guides to possible suitability.

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The relative importance of intensive and extensive experience on specific technical processes can be decided only in conjunction with the type of work to be supervised, the nature of control over the processes, the degree to which decisions on technical matters are to be made by the foreman, and the amount of assistance given by process specialists such as engineers and chemists. If only to give self-confidence to the departmental foreman, it is necessary that he should either be thoroughly acquainted with the manufacturing processes to be supervised, be capable of acquiring an understanding of, and competence in, them quickly, or possess outstanding compensating qualifications. Where processes are highly technical or extremely intricate, so that previous trade knowledge and experience is absolutely essential for detailed departmental control, it is more difficult to find supervisors adequately qualified in process matters and at the same time possessing executive competence. In these cases a division of duties is sometimes found to be a suitable solution. Process matters of manufacture are assigned to technically qualified men, while labour, planning, and cost control in the department are left to the foreman. It should be noted that the tendency of modern mass production methods is to break down complicated technical processes into simpler operations so that control can be exercised more easily, and dependence on persons only technically qualified, and unversed in modern ways of production control and unreceptive to new methods of mass manufacture, can be lessened.

ENERGY AND GENERAL HEALTH. To attain a high standard of competence, the foreman should enjoy robust health and possess more than average reserves of energy, both physical and nervous. There is small place in the workshop for a supervisor with poor health, calling for "off" days. The foreman must be prepared for long and irregular hours of work, equal at least to the hours his operatives work; and in addition to considerable physical exertion, he must be able to think clearly and take action decisively on pressing and future problems. Executive work of the supervisory character involves a wide variety of activities, and numerous, but sometimes unavoidable, interruptions. Fatigue, due either to insufficient or poor control of energy, often accounts for those inherent faults of foremanship such as indecision, delay, and uneven temper. Unlike the operative, the foreman has to decide what is to constitute his own work, in addition to controlling the work of others. There is a vast difference between the foreman who merely supervises

in a casual way simply to maintain routine, and the foreman who besides doing this, is constantly looking for means of saving time and materials. It is easy to know a competent foreman by observing the way he uses his time; for in many cases, having almost a free hand, he can use his time economically and profitably, or fritter it away ineffectively. Energy and good general health are the mainspring from which arise those most desired qualities in the supervisor such as tenacity of purpose, continuous and unrelaxing effort, enthusiasm, with a vigorous and versatile personality.

TEMPERAMENT. For success in supervision certain qualities of temperament are necessary in order, first, to establish capacity for authority, and secondly, to encourage individual striving and teamwork. The foreman should be generally acceptable to operatives, as distinct from being imposed on them, and able to co-operate with the management while conforming to those standards of competence required by the company. He must not only be able himself to work, but must be willing to work with superiors, subordinates, and colleagues. It calls for a certain maturity of temperament for a man to apply himself constantly and consistently, with a practical sense of perspective, to the common aims of the company. In his general conduct the foreman should display firmly established self-control and the ability to get things done if possible by persuasion and tact, but he should also possess that calm self-confidence and determination which are often necessary to overcome resistance to change. As qualities of mind desirable in approaching his day-to-day routine, the foreman should be frank, direct, thorough, and straightforward in his dealing, as well as impartial and independent in his judgments. His general habits and his past experience should leave no doubt as to his integrity, dependability, and sincerity.

31. The Supervisory Specification

Having settled the general considerations concerning the selection of staff, and having passed on to a more specific statement of the essential qualities required in a foreman, these general views should be modified and adjusted in relation to any practical peculiarities of specific supervisory jobs. The extent to which technical knowledge and skill are necessary, the scope for planning and initiative, the nature of authority and responsibility, the character and

peculiarities of the working force, and so on, must all be taken into account in drawing up, as it were, a supervisory specification. In doing this, it is common to apportion a different value to each essential requirement on a percentage basis. A rating scale so devised can act as a valuable guide in the process of selection. Once the supervisory specification has been drawn up precisely, it is necessary to examine sources of supply; investigate and evaluate the relative merits of alternative applicants; appoint, follow up, instruct, and train foremen with a view to promoting them systematically as opportunities occur.

32. Sources of Supply

Foremen may be recruited from existing operatives or lower graded staff, or from experienced foremen in other companies. In the selection and appointment of foremen a good deal is to be said in favour of promotion from operative or lower graded staff. This source has the advantage over any other in that it provides first-hand knowledge of the person selected and allows sufficient time to consider his suitability for a specific supervisory job. Although this advantage is one not to be underestimated in value, it is necessary to insist on the essential qualifications for supervision being available in the person selected. This, however, is not likely to be the case unless the person to be promoted has had suitable training, has shown himself as possessing the right type of character, and is also sufficiently experienced in technical matters. The upgrading of men from operative or low-grade staff positions has the advantage of stimulating the general endeavour for promotion.

Except in unusual circumstances, it is inadvisable to promote direct from operative to supervisory rank. The most useful method of selection from within suggests that promotion should be made by graduated stages, each stage training and preparing for increased responsibility. In this way, the operative can be made either a section-leader or a charge-hand, and as he qualifies by training and experience, he can be promoted from charge-hand to foreman. Alternatively, promotion from within permits those selected to be drafted as understudies in order to gain experience and to receive the training necessary to make them qualify for, and be competent in, supervisory responsibilities.

The disadvantage of upgrading lies in the selected person's inability to break away completely from manual operations and

assume supervisory authority in the same department. Transference to another department, either for training or temporary control, might be necessary in order that any strong personal acquaintances made, or habits formed, while employed as operative, should not stand in his way when taking over supervisory duties. The older workman is likely to respond better to newly acquired privileges and responsibilities than the younger man, and is likely to have less dissatisfaction from the employees he is supervising.

In cases of rapid expansion, and where no suitable person exists already in the company, foremen must be enlisted from an outside source. Although in certain cases a person of operative rank in the company he is leaving might be promoted to foreman in the company he is joining, promotion from outside frequently implies the selection of an already fully experienced foreman.

In big industries where a great number of companies are engaged on similar classes of work, as in general engineering, a large force of foremen is available for better or more satisfactory positions, and these foremen are desirous of taking up new jobs for a wide variety of reasons. In smaller industries and trades, foremen with the necessary technical knowledge are much more scarce. In such cases companies considering expansion either enlist with a view to promotion, and train within their company, or so organise their departments that technical knowledge is not of primary importance. Selection from outside always involves a large element of risk. The mere fact that a foreman has been employed by a large company, or even that he has had supervisory experience in a large department, is no necessary criterion of competence. However, the disadvantages of recruitment from outside must be overcome by careful and accurate selection.

It is considered that by far the best method of developing foremen for the future, as distinct from the filling of immediate vacancies, is by the selection of persons who have received suitable instruction in technical institutes. A further advantage to be gained in this way is that the person chosen has sound technical knowledge, is likely to have the right type of mind, being scientific and logical, and will be willing to undergo a lengthy course of promotional training. Persons selected direct from Technical Colleges or Institutes can be trained according to a predetermined plan. They can be given opportunities to gain experience as operatives, and also to acquire a basic technical knowledge of

processes, as well as to understand the organisation, and to become acquainted with its personnel. In this case, it is usual for technical training to be continued to the necessary standard in the evenings, and then followed by suitable courses in foremanship and related managerial subjects. Experience has shown that where theoretical training and practical experience go hand in hand in technical subjects as well as in those subjects more strictly regarded as managerial, then the ideal method of training is being achieved. Where companies have real appreciation of staff as an investment, then thorough, systematic training is likely to give the best possible returns for the time and money expended.

The recruitment of staff should be accompanied by an accurate forecast as to the company's likely requirements, having full regard to wastage due to the loss of trainces and to some proving unsuitable during the process of training. In making this forecast it is necessary to take into consideration the existing staff, the likely loss for age or health reasons, and wastage by dismissal, demotion, or staff leaving on their own account. It is, of course, sound policy to have available wherever possible an ample supply of understudies already trained to take up positions where vacancies occur. At the same time, care must be taken not to engage or to have in training a number of persons substantially larger than those likely to be required, for undue delay in promotion leads to unnecessary wastage. Where promotion is unduly slow, or where appointment is unreasonably remote, men are inclined to lose their enthusiasm and either leave dissatisfied or remain disgruntled. Hitherto, persons appointed to the rank of foreman often remained in these positions for considerable periods, as long as thirty years or even more, and this occurs especially where a company's activities are established and stabilised. In such cases, where promotion is likely to be relatively slow and promotional prospects delayed, it is advisable to have trained and available substitutes or understudies in the rank of charge-hand or assistant foreman. In the training for, and appointment to such positions, the possibilities of advancement should be made clear from the outset in order to avoid unnecessary expense in training and undue disappointment to the persons concerned.

33. Methods of Selection

The interview for the selection of supervisors, like the examination for testing ability, admittedly has certain limitations, but all

things considered it is the best and most reliable guide to suitability. Provided first, that all essential information regarding the applicant, covering age, character, education, experience, achievements, interests, wages earned, responsibilities, social habits, and so forth, have been made available, the interview can be used to supplement this information by checking soundness of knowledge and degree of skill achieved. Suitability of type for the organisation and capacity for the tactful handling of employees can also be judged by carefully devised questions. Some of the shortcomings of the interview, due to temporary impressions formed by the person interviewing, can be overcome by insisting on more than one meeting, and where possible having additional opinions as to the applicant's suitability, preferably based on rating scales.

In larger companies where many applicants might be interviewed, and in order to overcome personal bias, an appointments committee is set up to examine candidates successively and separately, so that selection from a short list is based on group opinion. In smaller companies, the candidates should be interviewed either by two or more members of the senior staff at the same time or by each separately, in preference. Such an arrangement of conducting selection based on more than one opinion means that there must be, in the minds of the selectors, clear understanding of the company's staff policy and immediate or future requirements. Considerable and careful attention must naturally be paid to selection, particularly if substantial expense is subsequently to be involved on training, and especially if extensive staff turnover is to be avoided.

Psychological tests specially devised have been used with success with those of operative rank but have rarely been applied to those selected for supervisory positions. However, the rating scale based on the specific requirements of the job has been employed as a valuable and impartial guide by which to judge the comparable merits of the various applicants available. The rating scale can usefully be supplemented by carefully thought-out questions of a type likely to test the candidate's thinking capacity; his ability to describe accurately, clearly, and briefly; his facility for logical expression; his aptitude both for general issues and important details; his organising ability and regard for systems; as well as his approach and attitude towards problems involving machines, materials, and men. Thus, to ask a candidate how he would solve or set about solving a certain practical problem, or to ask him to

describe in detail a system of operation with which he was familiar, would, if discussed with him, help to test his probable reaction to criticism or suggestion, ability to overcome resistance to change, determination to persevere, and capacity for persuasion and teamwork. Too much cannot be expected of the foreman's powers of description or his use of correct English, but it is necessary to be satisfied that instructions can be given precisely, clearly, and briefly so that the operative will have no difficulty in understanding them.

Throughout the interview, unless particularly prescribed by the requirements of the job to be filled, selection should proceed more along the lines of ability rather than of knowledge; of capacity to learn rather than of already acquired skill; and of powers to get practical results from individuals rather than of capacities suited only to more or less abstract devising and planning. Selection should be based on potentialities in preference to past achievements, the latter acting simply as a guide to the former.

Final appointment, by whatever methods of selection employed, is by no means difficult, and often surprisingly simple, when care has been taken to draw up, and commit to writing, a definite and precise job specification, and to relate and evaluate individual qualifications to these requirements. The preparatory work is much more tedious than the final decision.

34. Terms of Appointment

Appointments either for training or as working foremen should be accompanied by some written agreement or letter of appointment. Companies deciding to expend a substantial amount of time and money on instructing and developing their foremen naturally do not want those men when trained to seek employment with competitors in the same trade. Whether signed agreements are desirable, and to what extent they can be enforced in restraint of trade are debatable points. Most companies prefer to be entirely free from binding agreements in restraint, and to rely on controlling and retaining their staffs by offering acceptable conditions and attractive incentives.

It is necessary, both in order to encourage men to seek positions of supervisory responsibility and to retain them contentedly in those positions, that the privileges and conditions of employment be made worth while. One of the chief difficulties in enlisting

foremen from men satisfactorily educated and suitably trained technically, lies in the relatively poorly recognised status of those of supervisory rank. The foreman must work at least as many hours as the operatives in his department; often his salary is little more and sometimes less than that of piece-working employees. Then, too, he has few privileges, limited holiday and sickness facilities, and little if any provision for retirement or prolonged absence. Considering his extra responsibilities, his continuous worries, and the length of his working week, and comparing this with the conditions usually enjoyed by operatives who have trade-union support and protection, the advantages of rank are usually non-existent.

Before better-qualified men can be enlisted for supervisory positions, the status, remuneration, and general conditions need to be raised as a preliminary to, or along with, upgrading, training, and general development. On the whole, but varying to some extent with relative responsibilities, foremen should receive wages and enjoy conditions up to 50 per cent better than the average for the operatives they supervise. If a fixed salary can be supplemented by a financial incentive, whether based on factory profits or production, or whether dependent on departmental output or on improvements made, so much the better for distinguishing and improving the status of the foreman. Contentment in executives is largely decided by the degree to which they are taken into the confidence of the senior officers of the company; the collaboration they receive from their superiors; and the conditions of co-operation existing among their colleagues of similar rank. Where foremen are regarded and publicly recognised as part of the managerial force; consulted on departmental changes; advised on company policies; encouraged to contribute towards its general well-being; commended or criticised fairly (but discreetly, and not before their men) on their individual accomplishments; upheld in their position of authority at all times; and encouraged in their efforts to foster teamwork by day-to-day contacts and by regular conferences; then everything possible is being done both to enlist and to retain a competent supervisory working force. Small privileges providing scope for personal freedom, canteen, club, and cloakroom facilities, and so forth, are welcomed by the foremen as tangible evidence to their authority and status.

THE SELECTION OF FOREMEN

35. Conclusion

Consideration of the problems involved in the selection of first-line supervisors leads to a number of important conclusions:

- (a) The company must review its business policy and relate its supervisory requirements to the extent of expansion expected and to the degree of development decided upon;
- (b) Full recognition of changing business practices and industrial conditions calls for new techniques in the treatment of current and future problems, both technical and personal;
- (c) It must be decided whether these new demands can be met from existing staff, or whether resort must be made to outside recruitment;
- (d) Selection and appointment must be made more with a view to carefully forecasted future requirements than to the exigencies of immediate needs;
- (e) Supervisors should be selected on a basis of general suitability for responsible executive work rather than on the ground of particular technical or process knowledge and skill;
- (f) The level of status of supervisors must be raised in order to facilitate the development of managerial teamwork.

The qualities required in the new foreman emphasise the power of persuasive leadership as opposed to a capacity for aggressive driving. There is need for creative and constructive development to replace conservative adherence to established routine. Foremen must be chosen with a view to their potentialities, and should have a desire for, and be capable of, self-improvement, with a strong capacity for encouraging and enlightening their subordinates. They must also be industrially minded and essentially practical, so that even while carrying on their routine work effectively, they are also constantly on the look-out for improved methods, realising none-the-less that there is no room for continuous trial-and-error in a business which is interested only in sound, practical, and profitable devices and systems.

Of the most fundamental and vital importance is the acceptance of supervisory staff as an earning asset, where as much attention has to be given to the selection of men as to the purchase of machines and materials. It is as important to dismiss or demote a wasteful foreman as it is to scrap or replace an obsolete machine. Men with potentially higher earning capacities must be enlisted

and encouraged in the same way as equipment is put to better use by rebuilding and by additional devices. Latent talent must be turned into positive value as redundant scrap is re-employed or converted into cash. Proficiency prevails most where it is encouraged most. Selection of men, like the purchase of plant, should be based not on buying price but on producing cost. Reward is related to return; and where financial incentive exists, results are likely to be the more satisfactory. Thus the process for appointing suitable supervisors covers distinct and progressive stages—specifying; seeking; selecting; training; stimulating; rewarding; retaining; and where each of these receives the amount of attention and ingenuity which is justified in business, satisfactory results are likely to prove an ample reward.

SECTION V

FOREMANSHIP TRAINING IN THE UNITED STATES

36. The American Scene

America can rightly be regarded as the birthplace of foremanship training, not necessarily because it was there that the idea was first promoted, but rather because of the considerable attention given in that country to the problem, the widespread acceptance of the need for, and the adoption of, courses of training, and the immense growth in the technique of developing foremanship capacity. It is for this reason, coupled with the increasing recognition of, and demand for, foremanship training in this country also, that a review of American experience and methods can be of value at the present time in guiding British practice and procedure.

The significance of foremanship was stressed forty years ago by Taylor, when he developed his plan of functional supervision as an integral part of scientific management. Appreciating both the importance of the task and the inability of the average foreman to fulfil it satisfactorily, Taylor contended that the work should be divided among a number of functional specialists. During this phase, ability could be acquired only through the hard school of practical experience.

The original attempts to improve the standard of foremanship were made during the War of 1914–18 when, under the stress of emergency, some form of rapid training became essential. During the post-war years of 1920–29, when new products and new processes were being developed to meet new markets, and greater output was needed to meet expanding demand, stress was placed on continuity of production and regularity of employment resulting from effective planning. The years of depression which followed from 1929–33, emphasised the outstanding need for cost and quality control to meet reduced demand and increased competition. From 1933, the Roosevelt reform measures, which greatly increased the powers of organised labour, emphasised the need for good foremanship, for managers realised that poor supervision would aggravate labour demands and controversies.

Throughout the whole of these topsy-turvy years there was growing up in America a greater expansion of business and a rapid development in organisation. As conditions changed and emphasis was in turn placed on certain prominent aspects, new devices were developed for the control of output, costs, quality, materials, planning, progressing and labour. The rapidly increasing size of the business units produced new problems in the delegation of authority and responsibility. The widespread adoption of functional specialists affected greatly the scope and influence of the workshop foreman. New means of communication, co-ordination, collaboration and co-operation had to be devised. The immense expansion of the technical aspects of business and organisation, almost to the exclusion of personnel considerations, led to an everwidening gap between management and men. For two decades prior to 1930, an attempt was made to bridge this gap by introducing and increasing the influence of the personnel department through "welfare schemes". The casual, superficial, and supplementary influence of such schemes was soon to be recognised when widespread labour troubles raged unabated. It was realised by many that industrial executive contentment was not to be found in Government stipulations for regulating employer-employee relations, in Trade Union Agreements, or in the observance of any general rules and regulations. There must be real understanding, which means recognition of the individual, and this infers personal day-to-day contacts, which can be effected satisfactorily only by the foreman.

The great expansion of industrial activity, the rapid development of mass-production methods, the higher individual efficiency, the improved technical processes, and the increased complexity of modern organisation have all emphasised the outstanding importance of foremanship. The swiftly moving changes in social conditions, the growing independence of the employee through trade union representation, and the personal influence exercised by the foreman, have also directed attention to his careful selection, training, promotion, remuneration and status. Such tendencies and trends, already well-established in the leading and more progressive companies, are now being accentuated and accelerated under the impetus of present-day war conditions.

Foremanship training in America, it might be concluded, arose from the impelling need for increased productive capacity and the incessant demand for improvement in industrial relations.

One of the high-lights of foremanship training development is the Western Electric Company's experiment, conducted at the Hawthorne Plant in Chicago between 1927 and 1932, which involved the individual interviewing of 21,000 employees to ascertain their reactions to working conditions. This investigation forcibly emphasised that the greatest improvement in production could best be effected through training the firm's 1,000 supervisors in the exertion of more effective influence over employees. This investigation was carried out by members of the staff of Harvard University. It received widespread attention and added much impetus to the movement in favour of training supervisors.

Some idea of the wide application of foremanship training in America can be seen in surveys made recently. An investigation was made by the National Metal Trades Association which showed that of 900 concerns 47 per cent had training programmes. In a survey made by S. B. Mathieson, covering 195 industries with 2,191,000 employees, it was found that 34 per cent had foremanship training programmes. In 1934, The National Industrial Conference Board reported that of 233 companies analysed, 47 concerns were maintaining courses, 100 were holding conferences, and 30 had committees working. In 1936 the same Board covered in a similar way 2,452 companies, representing 4,502,608 employees, and found that although only 185 firms had training programmes, these firms accounted for 32.8 per cent of the employees dealt with in the survey. There is a clear indication, therefore, that foremanship training has been adopted for the most part in the bigger firms.

Since 1936, however, there has been a marked increase in the number of firms, large and small, which have adopted a definite training scheme for their foremen, and this is due largely to recent labour legislation, an example of which is the National Labour Relations Act. This piece of federal legislation safeguards the organisational rights of workers in interstate commerce, and states specifically that in the exercise of those rights, they shall be free from interference and discrimination on the part of employers and employers' agents. A number of companies have been prosecuted under this law because of anti-union actions of individual supervisors in their employ. Many companies, therefore, have instructed foremen with reference to workers' rights under the Act, and this instruction has been supplemented in many cases by advice with regard to supervisory practice.

97. E

The American problem is similar to our own. Delayed for a considerable period before the final decision for defence was reached, an enormous expansion of war industries was eventually undertaken with exceptional speed. Some idea of the scale of this expansion is afforded by the Curtis-Wright Corporation, which in July 1941 occupied more floor space than existed in the entire aircraft manufacturing industry of the United States in September 1939. Such rapid development calls for a greater measure of administrative control, better managerial practice, more complex organisation, and the necessity for up-grading supervisory personnel. Then too, the unusual circumstances of production, together with the great scarcity of trained labour, furnished a basis for demands for marked increases in wages and for new privileges, notably the "closed shop", whereby only members in good standing in one or more designated unions are to be employed.

Under such conditions the foreman can be of paramount importance. The technical aspects of production are infinitely more difficult than hitherto, and in addition suitable labour must be engaged, trained, placed, and handled with far greater care and consideration than previously. Not only must there be better supervision, but there must be more and better supervisors. The significance of this problem has been realised by the Council of National Defence whose Advisory Commission at the end of 1940 made recommendations for improving supervisory practice through training by the conference method.

A review of American practice emphasises two striking conclusions: first, the U.S. Government has taken a leading interest in the training of foremen in industry, stimulating rather than forcing its development; and second, training is regarded and accepted as the responsibility of employers rather than as the free choice of employees who are seeking promotion.

The United States Department of the Interior, under the provision of the Smith-Hughes Act of February 23rd, 1917, set up the Federal Board of Vocational Education charged with the responsibility of making studies and investigations, and publishing reports designed to aid the States in the organisation and operation of efficient vocational education. The training of foremen was recognised as an important part of industrial education. Although the primary concern of the Board, the work of which was greatly extended under the George-Deen Act of 1936, was to act in an

advisory capacity to industrial concerns and educational authorities, it also undertook the training of suitable conference leaders. In directing attention to the need for training, in publishing books and pamphlets, and in advising on the method and material for successful conferences, immense assistance has been rendered by the Government through its official attitude in offering support, advice and leadership in the problem of foremanship training.

More recently, in August 1940, a Training Within Industry Division was set up under the National Defence Advisory Commission. After being transferred to the Office of Production Management, it was later incorporated in the War Manpower Commission. The function of this department was to discover the most urgent manpower needs of industry and to devise the best methods of training operatives and foremen intensively. By the widespread distribution of informative pamphlets and detailed recommendations, the Government engaged in an intensive propaganda drive to establish sound training within industry. The great influence of Government support for training operatives and foremen was recognised and utilised to the full by the employment of specialists and consultants available without charge to industrial concerns generally. Further details of this programme are described in Appendix A.

Both Government and Industry, in directing foremanship training along the right lines (in fact preparing for a period of progress and prosperity), were ensuring the utmost flexibility in meeting future requirements, securing understanding and contentment in the daily task, and stimulating personal efficiency in business, by their widespread installation of trained executives. It was part of the national policy, for, as President Coolidge said, "The business of America is business."

American companies, which have had long experience with foremanship training, realise that satisfactory and permanent results cannot be achieved overnight. Foremanship is an educational process which develops gradually, for not only does it take time for the foreman to acquire the necessary technique, but he must also change his mental outlook to suit the new conditions. Firms which adopt a programme of foremanship training must be able to foresee and contend with innumerable difficulties and must exercise patience in awaiting results. Success comes most quickly when the right method is applied in the right way at the right time, and a review

of American practice and procedure goes far in demonstrating the best methods to adopt.

37. The Need for Training

The significance, both socially and industrially, of better management must not be under-estimated in the changing circumstances which give greater power to labour, with increasing independence of the individual worker, and a growing demand for the greater control by employees over the conditions of their employment. It is of great importance that management and supervision be exercised with more intelligence, foresight, and sympathetic understanding than ever before, if industrial and structural authority are to be maintained in their present form. It is only through such methods of management that it is possible to avoid control by committees, decisions by conferences, and increasing interference by more exacting legislation.

The necessity for foremanship training in America finds its fundamental support in the universal belief that education has its just reward which, incidentally, is a conception more widely accepted in Scotland than in England. Then too, in America, there is a very strong belief in the democratic principle of equality of opportunity, and this is amply justified by a rate of individual progress unknown in Europe. Consequently, the drive for personal efficiency by employers on the one hand, and the desire for promotion by employees on the other, have produced the complementary conditions essential for training. Progress of the firm and promotion of the individual go hand in hand where both are adequately prepared for future possibilities, so that training, as one writer puts it, is a "basic philosophy of management".

Development is the keynote of the American industrial future.

Development is the keynote of the American industrial future. It is being pursued by an expansion and extension of activities, coupled with greater and still greater internal efficiency. Progress is marked by the increasing complexity of operation. Rough-and-ready operations are abandoned in favour of scientific method, and there is a greater attention to, and control over, detail. As a result, the business unit is becoming more sensitive and susceptible to changing conditions, so that planning ahead is a vital necessity. It is realised, therefore, that if development is to continue unimpeded, the rate of progress must be entirely regulated by the capacity of the management, including the foremen, to respond to the demand for

improvement. While the upper strata of management, because of their better general education and more precise training, are able to adjust themselves, it is found in practice that similarly rapid changes are not possible with supervisory staff. But with a rapidly expanding company it is better to promote from within than to engage from outside. It might therefore be concluded that if a company has the prospect of a profitable future, it should endeavour to close the ever-widening gap between management and foremen; it must prepare its existing staff and promote from it; and it must ensure that the standard of executive direction is equal to the expanding activities. All this is done by means of foremanship training.

With the increasing rapidity of changes, with the introduction of new systems, and with adjustments in procedures to meet everchanging demands, it is more than ever necessary to maintain a close co-ordination and a more intimate collaboration within the organisation. As firms grow, there is a widening of contacts, there arise conflicting instructions, and there is an attempt at such forms of control as frequently lead to misunderstanding. The training of foremen by the conference method tends to overcome these undesirable developments, for frequent meetings are usefully employed to convey information, to engender a proper outlook, to provide opportunity for discussion, to disseminate policies and instructions, to ensure uniform application of procedures, and to stimulate enthusiasm. Such a measure as this tends to overcome the remoteness of control and the restraints upon personal leadership, which are outstanding weaknesses in some large-scale organisations.

A well-organised administration implies full recognition and support of the status, responsibility and authority of each of its foremen. The foremen should be taken into the confidence of the higher management, and should be advised before changes take place rather than allowed to find out about them afterwards. They should be given the detailed information necessary for them to control their departments, and this means that they must develop, or be helped to develop, the ability to use statistics intelligently and effectively. It is so easy to view technical and other changes from the wrong aspect that it is necessary to make sure they are fully appreciated, and accepted without question by the authority responsible for their operation. Foremen also should be expected to make suggestions for improvements, but once again such sugges-

tions can only be obtained through proper encouragement. It is perhaps for the reason of growing technological development that the Metropolitan Life Insurance Company's Policyholders Service Bureau gives the three main objectives of foremanship training as: providing foremen with the opportunity to acquire information; helping them to think clearly about their jobs; and developing ability in doing what is required of them. The desire for these achievements and the justification of them is fully appreciated by those who have tried to improve quality of workmanship by stressing the great importance of customer outlook.

If for no other reason, it is contended in America that foremanship training is amply justified if it leads to an improvement in industrial relations. The Roosevelt Recovery Acts have embodied an immense legislation regulating the relations between employers and employees. As the result of the impetus given to organised labour through trade unions, numerous labour disturbances occurred which called for the most careful handling. To supervise men when any trivial dispute might involve a major disturbance implies the exercise of considerable discretion if productive capacity is to be maintained.

Apart from this recent legislation, which has affected only the past five years, there was a growing feeling throughout American Industry that the rapid expansion of plants, together with the increasing complexity of operation, was leading to an ever-widening divergence between the men and the management. Concentration on the technical aspects of production to the exclusion of personnel problems had its reaction. It was found that men treated as machines did not produce so much as when they were treated as individuals. Behind this viewpoint was the growing conviction that men work best when they are happy and contented. Investigations proved that labour disputes frequently arose over petty misunderstandings, stupidities, and supervisory incompetence. Personnel departments, although invaluable in many respects, were not able to regulate industrial relations which were largely dependent on the day-to-day contacts of the workshop.

It might be concluded that the results to be expected from foremanship training will depend on the character of the organisation, on its prevailing problems, and on its weaknesses. The suitability of the supervisor and the appropriateness of the arrangements for training and the methods of carrying it out will also have

substantial bearing on the results to be achieved. Generally, the advantages of foremanship training can be considered under three main headings as they affect (a) management-foreman relations; (b) the foremen themselves; (c) their subordinates.

The advantages accruing to management may be summarised as follows:

- (a) Foremen acquire a better appreciation of their duties and collective responsibilities through a better understanding between management and foremen;
- (b) There is stimulation for supervisory efficiency, making the foremen of greater value to their company, while they in return receive higher rewards;
- (c) A means is provided of discussing and disseminating new policies and procedures; and uniformity of understanding and application of company's rules and regulations are ensured;
- (d) Opportunity is created to stimulate team spirit, thus effecting co-ordination of effort;
- (e) Management is enabled to assess promotional possibilities of foremen;
- (f) Emphasis is placed on the development of the company, the necessity for improvements, and the need for training and encouragement throughout the organisation.

The foreman has many advantages to gain from properly regulated training:

- ((a) He obtains a clear idea of what is expected of him;
- (b) He learns of new methods, and benefits from new ideas;
- (c) He is provided with an opportunity to express his ideas and compel constructive criticism of them;
- (d) Provisions are made for close collaboration with colleagues, ensuring mutual understanding and respect;
- (e) Social and industrial status of foremen is improved;
- (f) Opportunity is provided for foremen to express themselves, and to demonstrate their promotional possibilities.

Subordinates are also likely to benefit from the policy of established foremanship training in the following respects:

(a) There is a feeling that the policy of the management is being carried out precisely and uniformly as intended;

- (b) The policy of proper training is more likely to be extended to operatives;

- (c) The representation of employees is made more effective; (d) Instructions are more likely to be clear, definite, and precise; (e) There are greater possibilities of improved working conditions

Development is the true aim of business. Progress is made more certain in organisations which pre-plan their activities. That type of managerial effort stands in sharp contrast to the more common policy where results are left to chance and where concern with the future is casual. Modern organisation is characterised by pre-planning and by definite action. Fundamentally, training is part of the policy of pre-planning and it should be conducted according to a definite programme.

38. Organisation for Training

It is to be observed that once the importance of foremanship has been recognised and the necessity for training accepted, it follows that procedure must be organised; this is regarded in America as the primary responsibility of industry. The whole problem of training is to be viewed from the angle of industrial requirements rather than educational policy, the stimulus being provided from inside the factory rather than actuated from without.

Foremanship training, apart from effecting immediate benefits, is to be regarded as an investment to ensure competent staff available for development, and this implies that the future must be foreseen, foremanship requirements forecast, and progress planned ahead. It is of paramount importance that due regard be paid to wastages and failures in trainees.

The first essential of organisation for training is the selection of suitable trainees, and these usually form two groups: existing foremen with experience, and candidates for future appointments. Now, as training will take up valuable time and incur some expense, it is important that the effort be spent on those with future prospects or with promotional possibilities. With this in mind, there is a tendency to establish the principle that new positions are to be filled as far as possible by existing employees. This encourages continuity of service, and inspires a serious attempt to acquire. supervisory competence. There are, incidentally, many advantages

in promoting from within: an existing employee knows both the technical and trade peculiarities of the job; he knows the work-people individually, and their abilities; he knows and is known to his supervisors and his colleagues; and sincerity of purpose is attributed to the management. Training planned over a long period would obviously be ineffective when continuous changes occurred among supervisory staff or trainees. The policy of providing adequate reserves, and for the upgrading of staff, is finding wide acceptance, especially among developing firms, and its justification has been amply proved by war conditions.

The problem of training prospective supervisors should be regarded as separate from, and supplementary to, the immediate and intensive training of experienced foremen. It is also advisable to establish a complete industrial-training plan, graduated and coordinated, preferably under a directly responsible executive, to deal with all ranks from the operative to the higher grades.

There is no doubt that for training to be satisfactory and successful, the sound selection of trainees is a necessary preliminary step. Reference may be appropriately made, in this connection, to the work recently carried out by Dr. R. B. Hersey, Assistant Professor of Industry at the University of Pennsylvania, and described in *Problems in Selecting and Training Supervisors* (A.M.A. Personnel Series No. 47, Feb. 1941). The investigation was carried out with the supervisory staff of the Pennsylvania Railroad Company. The essential abilities and characteristics of the foremen were set out, and suitable separate tests devised. These were as follows:

- (a) General information on industry, trade and job;
- (b) Self-expression in words and sentences;
- (c) Power of concentration necessary for carrying out instructions under pressure and otherwise;
- (d) Elementary knowledge of arithmetic;
- (e) Ability to reproduce sketches;
- (f) Speed of perception and ability to take quick decisions;
- (g) Reflection and the ability to solve problems after sleeping on them.

In addition to these leading characteristics which were subject to tests, special attention was given to physique as revealed by medical examination; to personality traits essential in supervision; to training; to experience, including service and seniority; and to

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operating skill, previous experience, and the individual's own efforts at self-improvement. Last, but not least, it was found necessary to determine the progressiveness of the prospective trainee, to ascertain his ability to profit from past experience, his ambition, his personal habits (good and bad) and his capacity for promotion.

Of particular importance was the need to provide some measure of results, and these were revealed by a classification of trainees into three groups, namely: promoted; unchanged; and demoted.

It is claimed that by commencing with careful selection, the expense of training is devoted only to those most suitable, that there is a constant incentive to self-training while the programme lasts, and that the supervisors themselves are stimulated to greater personal effort and interest. (For further details, see N.I.C.B. Personnel Policy No. 32, Experience with Employment Tests.)

The selection of supervisors by vocational tests is new and has a relatively limited application, but the alternative use of the rating scale as a guide and measure of suitability is much more common. The principle of the rating scale is to set out and to assess the relative importance of each ability and qualification needed by foremen to meet certain specific requirements. The advantage lies in the attempt to set down on paper, rather than to roughly estimate mentally, the comparative qualities of foremanship.

A typical chart for the rating of foremen is issued by the National Foremen's Institute. It sets out ten characteristics essential to foremanship: quality control, teaching ability, mechanical ability, planning ability, cost consciousness, co-operativeness, forcefulness, progressiveness, judgment, and initiative. Each characteristic is weighted in marks and the relative degrees of proficiency—excellent, good, average, fair, and unsatisfactory—carry a corresponding number of marks. Total scores are being discarded, since any such single figure diverts attention from the important elements of the problem. Interest is properly centred in how well a given candidate's qualities compare with the qualities fequired by the particular position for which he is being considered.

And the best practice here recognises that one cannot do a firstclass job in selection by trying to judge candidates with reference to a generalised list of qualities, which may be more or less commonly desired in foremen. It is being recognised that one foremanship has

requirements significantly different from those of another foremanship, and selections are being made accordingly.

While, admittedly, the scientific selection of foremen concerns rather new recruits than old employees, it is important nevertheless to appreciate that training should commence with a staff selected because of their potentialities and their ability to respond favourably to new methods. The policy of making do with old employees whose long service is their chief claim to position, although sound in sentiment, is unsound for purposes of training.

As a preliminary to selection, it is clearly necessary that an exact job specification be drawn up for the foreman's position, showing his duties, responsibilities, and the extent of his authority. Sound selection can only be based on specific requirements.

While training is to be recognised as a characteristic feature of modern American Industry, it must at the same time be noted that the intensity of training activities varies with the state of business, or, more precisely, with the outlook and growth of individual companies. During the 1920's, for instance, the training of foremen had a slow and on the whole solid growth, the more progressive companies of course leading the way. During the early 1930's training activities were almost negligible, but with the recovery in 1933-34 foremen training was again resumed. It grew rapidly after the passage of the Wagner Act and the growth of unionism in American industries. It is difficult to see what is happening at present: the impression is that the development of prospective foremen is going ahead rapidly, but that experienced foremen in American Industries now are so burdened with volume of production that training activities of the formal sort are being suspended to some extent.

The casual acquisition of knowledge and skill is no longer approved in well-managed American firms. To ensure that training will be properly conducted and not slighted, some of these organisations employ advisory officers who observe training procedures actually being followed by foremen and supervisors, and who assist those supervisors in improving their training methods. At one time there was a tendency for training to be co-ordinated and controlled by the personnel manager, possibly under the direction and guidance of a director, but the present general trend in large companies is to favour a specially appointed training specialist as an advisor and aid to the entire staff of supervisors.

This training advisor may report to the Personnel Officer, but more usually to the Plant Manager. Naturally, the companies that say training is a pervasive function of all supervisors are inclined to attach the training advisor to an officer of higher rank than are companies which view training activities as emergency measures to be applied at the foreman level only, or in the manual classifications.

Training is recognised as a fundamental function of organisation and is established as the definite and determined policy of the company. There is a growing tendency, in consequence, for the training of foremen to be part of a comprehensive scheme and a link in the chain for training all employees from operative rank to managerial positions.

In this connection, the experience may be recounted of the Household Finance Corporation which, while chiefly concerned with selling, provides conclusions equally valuable in manufacturing. It has been recently described by E. F. Wonderlic in A.M.A. Personnel Series No. 47, 1941. The Corporation is a large one with a widespread organisation, and in consequence there is a need for uniformity of procedure to facilitate transfers of staff, to make supervisors effective, to enable common training to be applicable throughout, and to accelerate the introduction of new staff. Again, rapid expansion placed a premium on up-grading. The training plan set out to produce branch supervisors and assistants, to prepare the way for organisational growth, and to develop men for advancement to positions of greater responsibility. Training, which covered the whole staff, did not commence until all the necessary information was collected, so that agreement was established between customer requirements and company selling policies. A wide variety of methods were employed according to their suitability; sometimes a short intensive course for branch managers was arranged at head-quarters, and sometimes information and manuals were used as a correspondence course for those unable to leave their branches. Everyone in the organisation was taught to regard training as one of his duties. That the company was prepared to spend so much time and money, led employees to think there must be something in training, especially when promotion was linked up with it. By establishing a complete and comprehensive scheme, uniformity of selling practices was assured; new employees became useful as quickly as possible; staff promoted to new positions were already prepared for them;

the availability of trained understudies made rapid expansion possible; and the effects of absenteeism and staff wastage were relieved.

A number of useful observations and conclusions are to be drawn from this experience:

- (a) A definite organisation for training was established;
- (b) A comprehensive plan ranging from operatives to management was found to be essential;
- (c) Training was graded and continuous;
- (d) Adequate preparation by installing standard practice was a preliminary requirement;
- (e) The best method of operation could be determined from the widest and best experience in the company and used for the common benefit;
- (f) The appointment of a specialist in training was amply justified;
- (g) Uniformity of selling practice and employee outlook became important acquisitions.

The organisation for training must count the cost and compare it with the results achieved, and accordingly, adequate records of progress must be kept. In this way, foremanship training is established as the definite and determined policy of the company.

The Metropolitan Life Insurance Company's Policyholders Bureau has set down four requirements for a good training course:

- (a) Management must be progressive and must share knowledge and responsibilities with foremen;
- (b) The leader must know his subject, and be able to impart it;
- (c) The group of foremen must be carefully selected;
- (d) The material presented must meet a practical need.

39. Methods of Training

The extensive training of foremen has produced a wide variety of methods ranging from comprehensive schemes organised within a works to meet the requirements of its own employees, to independent courses conducted by educational authorities. It is generally accepted, both by industrialists and educationalists, that individual firms should as far as possible establish their own programmes to deal in particular with their respective internal problems

and practices. In some instances educational institutions have supplemented company programmes with courses of lectures, by supplying conference leaders, by advising on procedure, and by issuing material in pamphlet form.

In the selection of the most suitable form of training, the size and character of the individual business must play a large part. Where many foremen are employed in one plant, training is usually the concern of a specialist who arranges for the constitution of different groups, as would be necessary with the Western Electric Company's Hawthorne Works. The Caterpillar Tractor Company, a much smaller concern, but working in three shifts, finds it necessary to have twenty-six conference groups. In these larger firms, prospective and trainee supervisors receive formal instruction at the company's own training school.

Firms of medium size, which cannot justify the expense of engaging a full-time specialist, or possess on their staff nobody with the necessary experience and qualifications, often resort to the services offered by a training institution. Competent conference leaders with wide experience take charge of training under the guidance of the firm's executives who supply the necessary information regarding local problems. Such conference leaders are available in various State Vocational Education Departments, such as, for instance, the New Jersey State Department of Public Instruction. Many industrial associations, such as the National Metal Trades Association and the National Founders' Association, offer conference services to their own and allied trades. Similar services are available from the National Foremen's Institute, and the Elliott Service Company.

Most medium-sized companies must make use both of conferences inside the plant and of educational facilities outside. The real province of the formal training provided by the educational authorities lies in the instruction of younger men and trainees. Courses are offered by State Universities, State Boards of Education, local schools, and private institutions such as the Young Men's Christian Association. Training in supervision either forms part of the technical course or is arranged as a subsequent study after the completion of the technical instruction. This latter is naturally the more common. Sometimes it consists of a course of lectures, but more often the lecture-conference method is preferred. The subject matter must be general and must invoke principles common

to all industries and be illustrated by material at hand. Attempts to make the course essentially practical are to be observed in the casemethod of instruction where set practical problems are analysed and solved. The value of such courses, conducted by competent instructors, is not to be under-estimated, especially for younger men who respond most quickly to intensive instruction.

There has been a tendency in America for educational institutions to work in much closer collaboration with industrial companies than is usually the case in this country. Rutgers University, New Brunswick, New Jersey, for instance, in organising tuition-free courses for foremen in Human Relations, Methods Engineering, Industrial Safety, etc., instead of holding them on the University premises, conduct 75 per cent of their courses in factory establishments for their foremen. The University provides the lecturers, who study the problems confronting foremen at their jobs, and adapt their lecture-discussions on this basis. One interesting feature, however, is that minimum requirements for admission to the course include a high-school education and the recommendation of a high executive in the company. The Federal Board of Vocational Education and the Office of Production Management Labour Division, Training Within Industry Branch, provide conference leaders for the purpose of advising and conducting meetings of supervisors.

Educational work with experienced foremen is conducted in America commonly by the industries themselves, since the experienced men seem to demand instruction that is specific and immediately usable. These educational efforts present special problems which require special methods.

The conference discussion has been found to produce the best results with older men; it is suitable to the subject matter, which is open to expressions of personal opinion, and it is admirably adapted to the type of persons being instructed. Thus the training of foremen in America is largely dependent on the effective organisation of discussion conferences.

To ensure the fullest advantages, conferences should conform to certain requirements, and the first and most important of these is the appointment of a competent chairman or leader. The person selected must be accepted by the group as capable, experienced, and as having the necessary authority. He should be able to plan ahead, not only the subject matter for a series of conferences, but also the

progress of each individual conference. He should avoid being regarded as a teacher, yet should be able to draw conclusions, emphasise principles, and indicate applications. He should have the ability to guide discussion, encourage debate, prevent diversions, avoid personal criticisms, inspire confidence, and should avoid being dogmatic and pedantic.

Secondly, conference groups should be as small as practicable. Ten members is regarded as a reasonable number for effective discussion. It is advisable not to exceed fifteen members in a working group, if personal expressions of opinion are to be expected.

Thirdly, the group should be composed of foremen of similar rank, experience and educational background, otherwise a danger exists of stifling discussion.

Fourthly, conferences should be held regularly, weekly if possible, but not less frequently than fortnightly; although in certain circumstances where the group contains highly qualified executives, monthly meetings might be preferred. Generally, the meetings are held in the company's time and on their premises, and these should be comfortable, ventilated, and free from noise and distraction. Meetings should last from an hour to an hour-and-a-half and should come to a definite close, not being allowed to drag on and dwindle out inconclusively.

Fifthly, controlled discussion should prevail, as distinct from teaching or instructing in the usual sense. The conduct of meetings, although a set piece of work is to be accomplished, should be informal with a free expression of opinion. In fact, all members should be encouraged to make contributions to the discussion and to make suggestions, and should be prompted to be brief and to keep to the point.

Sixthly, the topics for discussion should centre round immediate practical problems concerning the company, and should be kept as far as possible from the theoretical treatment of imaginary and general considerations. The subject-matter of the conference should be such as to enable the group to accomplish a definite piece of work, either in recommending improvements or in acquiring information which may be immediately put into effect by each foreman. It is common for such groups to discuss new policies, programmes, and procedures, together with such problems as might arise in their application, and in this way ensure uniformity of outlook.

Finally, conferences must be planned and properly prepared.

Any information disseminated in written form ought to be brief and compelling. Unnecessary reading should be avoided and statements should be simple and straightforward. It is advisable also to have conclusions incorporated in a report and distributed among members, and here the omission of individual names is generally preferred.

Of the many advantages claimed for the conference method of training foremen, perhaps the following might be set out as being the more important:

- (a) It is most suitable for adults who object to being "taught" or "going to school", but who readily respond to contributing their own experience;
- (b) If conclusions can be reached and action taken in consequence, the feeling prevails that the conference has been worth-while and not a waste of time;
- (c) In gaining useful ideas, the foreman feels he is getting some benefit which he might put into effect immediately;
- (d) Uniformity of outlook and application, and a greater measure of co-operation and collaboration, follow the better understanding which comes from the discussion of common difficulties;
- (e) The method is flexible and allows for the dissemination of company policies, for the discussion of general principles or specific problems, and for preparing ground for the introduction of new plans;
- (f) Provides the means of bringing together higher executives and foremen; allows for ventilation of difficulties and complaints; permits opportunity for expressing ideas and suggestions; encourages display of promotional possibilities; stimulates foremen to think for themselves; inspires self-development and self-confidence among foremen.

Towards the end of 1942 the magazine Supervision made a nation-wide survey of foremanship training by circularising 15,000 questionnaires to companies of various sizes. The average company from which returns were received employed 1,300 work-people, with an average of 50 supervisors of all kinds. The analysis brought out that 7 per cent of the companies had set plans for training; 12 per cent had regular conferences with varying and unconnected topics; 55 per cent had meetings without any specific

plan; and 26 per cent had no training arrangements at all for foremen. If this survey can be taken as truly representing the foremanship training provisions made in the larger companies in the United States, then conferences are acknowledged as standard procedure in 74 per cent of companies.

Of the 74 per cent of companies holding meetings for foremen, the following details were derived from the survey:

(a) Frequency of Meetings

32 per cent held weekly; 26 per cent monthly; 19 per cent bi-monthly; 16 per cent half-yearly; and 7 per cent daily, bi-weekly, and at irregular periods.

(b) Place of Meetings

86 per cent of the meetings are held in the plant; 10 per cent elsewhere; and 4 per cent partly in the plant and partly elsewhere.

(c) Attendance

71 per cent had full attendance at meetings; 11 per cent had 90 per cent attendance; 5 per cent had 80 per cent; and 13 per cent had between 50 and 80 per cent.

(d) Time for Meetings

71 per cent of meetings were held in the company's time; 23 per cent in employees' time; 4.2 per cent half in company and half in employee time; and 1.8 per cent time paid on sliding scale.

(e) Purpose of Meetings

48 per cent of companies gave the purpose as Business Routine and current matters; 30 per cent as Business and Training; 9 per cent as Training only; 6 per cent as Business and Social; 2 per cent as Training and Social; and 5 per cent as Miscellaneous.

(f) Responsibility for Planning Meetings

Meetings at 41 per cent of the companies were planned by Superintendents; 21 per cent by President (i.e. Directors): 12 per cent by General Manager; 11 per cent by Committee; 7 per cent by Production Manager; and 8 per cent by various other Executives.

(g) Chairman Conducting Meetings

40 per cent of the companies stated that meetings were conducted by Superintendents; 26 per cent by some other Executives; 12 per

cent by Foremen; 6 per cent by Production Manager; 4 per cent by Personnel Manager; and 12 per cent by different executives (specialists).

Of the 19 per cent with some sort of plan, more or less predetermined, 71 per cent of the courses were held in the plant and 26 per cent were held elsewhere; 45 per cent of the courses were held in the company's time, 52 per cent in the employees' time, and 3 per cent where employees were paid half-rate; 28 per cent of the companies employed outside specialists including 9 per cent provided by Government Departments, 25 per cent were conducted by Superintendents, 19 per cent by Personnel Manager, and 28 per cent by other executives.

These striking facts emphasise that the authorities in the United States are convinced that foremanship development is the responsibility of management; that supervisory meetings must be arranged for, and conducted by, their own staff; that such provisions are concerned more with existing foremen than with prospective supervisors; and that outside educational specialists should go to the factory rather than the foremen attend general lectures at technical institutions.

Foremen's conferences which are conducted according to the foregoing principles and along the lines confirmed by the survey, are regarded in America as well-designed devices to accomplish definite and tangible results. These conferences are controlled. Discussion is directed. Filibustering and irrelevant diversions are not allowed. Free expression of opinion is permitted provided it is constructive. The procedure commences with adequate preparation to be followed by an able presentation of the facts. Pertinent factors are discussed and additional experience is contributed. The information available, relevant to the problem under review, is summed up, and a conclusion is then drawn, either in the form of a plan of action for carrying out the decision, in making recommendations for improvements, or in establishing definite principles for common application. The real work of a conference is to realise composite opinion and uniform action; to correct, modify, or improve the outlook of members so that they face the facts and see things in the company's best interests.

A wide variety of training plans exists, all of which have their merits and demerits, and their suitability for certain circumstances.

These plans range from disconnected lectures to co-ordinated lectures; from lecture discussion to works conference; from correspondence courses to the supply of unconnected pamphlets; from the distribution of a planned study course to the foremen's club.

It might be concluded that the most suitable method of training will naturally depend on a number of factors, such as:

- (a) The size of the firm, and the character of its organisation, whether widespread or concentrated;
- (b) The nature of the supervisory job;
- (c) The degree to which technical knowledge and trade experience are essential;
- (d) The educational standard, general capacity, and degree of experience in existing foremen;
- (e) The extent to which previous training has already taken place;
- (f) The personal atmosphere prevailing and the co-operation between management and supervisors;
- (g) The relations with labour;
- (h) The relative urgency and nature of problems training is expected to solve;
- (i) The nature and extent of any impending changes or extensions;
- (j) Whether training is to improve existing foremen or provide prospective supervisors;
- (k) The local facilities available for formal training;
- (1) The availability of expert training staff within the company or without, either as consultants or educational authorities.

A summary of the methods of training available and their relative usefulness in America has been provided by a chart published by the Federal Board of Vocational Education in Bulletin No. 125.

40. Training Procedure

In addition to the organisation and methods of training, a good deal of work has been done in investigating the principles of teaching employed, and in selecting the most suitable medium. The concensus of American experience in this respect might be summarised as follows: all training should commence with a careful study of the aims to be achieved as this will determine the most desirable pro-

to Think

Ability Results x I × Increased Knowledge × Increased DIFFERENCES BETWEEN CONFERENCE WORK AND OTHER EDUCATIONAL AGENCIES 1 Thinking гошероду done × × × × þ ı × qof × × × Objectives Promotion ı ١ Specific Elficiency Characteristics × nonsaidsul 1 Information × × × × Treat-General × × × ment × Special × Outsider × × ۱ originates with Problem Management × × × × **Роте**тап ı Attitude Mental Active × Passive × × × Disconnected Lectures followed by Group Dis-Addresses or Papers by Plant Officials or Experts Regular Meetings between Management and Commercial Courses, Y.M.C.A. and the like Foremen on Current Difficulties Types Outside Letter Service Series of Lectures 5. Foremen's Clubs Conference cussion. ø.

¹The Training of Conference Leaders. Bulletin No. 125, Federal Board for Vocational Education, Washington, December 1927, p. 35.

cedure to adopt; for instance, the improvement of technical ability would be tackled differently from the task of effecting a change in industrial relations policy, and factory requirements differ from sales activities. There is an insistence on intensive training as distinct from general and extended instruction; and there is a distinct drive for developing maximum skill in the minimum of time.

It is considered essential to begin by giving a bird's-eye view of what training sets out to do, and what field it intends to cover, so that each detailed step is seen in relation to the whole. The correct method must be insisted on from the start; the method of treatment must be practical; principles must be converted into day-to-day practice with plenty of current examples; and actual operations must be used as the basic material, concrete problems of actual experience being preferable. Accuracy must be insisted on as a preliminary to speed, and time should be taken, especially in the beginning, to ensure complete understanding of one step before going on to the next.

Each step in training should deal with a specific subject, complete in itself, and progress should follow a logical sequence so that one subject is related to the next. This calls for a carefully planned programme. Training is best regarded as a continuous process in which day-to-day contacts can be used to supplement group meetings.

Finally, the medium of training employed should stress the need for initiative, the ability to apply principles, ingenuity in making the most of past experience to solve current problems, and the desire for continuous improvement.

The method and means of training will naturally vary with the number of foremen, their ability, and their educational background. Specialists in training have brought an immense variety of methods, and a wide choice of material to their aid. For instance, photography has been used with outstanding success, especially in connection with time and motion study. Films demonstrating methods of work before and after rearrangement, the principles affecting layout of work-bench, the ease of operation, the effect of lighting and seating, the advantage of conveniently placed materials, and so forth, all help the foreman to view his job from a different angle. Sound films have been employed to demonstrate approved and disapproved methods of treating an employee grievance. Some firms have varied their training by arranging visits either to special jobs in one

of their own departments, to one of their other works, or to some other factory in the same or in a similar industry. Comparable methods can of course be used with the formal night-school instruction.

A common feature is to be observed in the distribution of booklets or pamphlets to foremen as a supplement to, and in preparation for, discussion conferences. These are of two kinds: either a complete set of instruction booklets, or miscellaneous pamphlets on current problems. In this connection, it may be of interest to describe briefly the publications of a typical institution: the National Foremen's Institute. This Institute, started in 1929, and consisting of specialists in training, industrial relations, etc., has produced a set of twenty-five manuals covering the entire field of foremanship. The course is supplemented by a conference leader's manual setting out the general principles to follow, and the detailed conduct of each meeting. This greatly reduces the work of planning and preparing materials for meetings, and makes the best use of the information presented. Foremen are each supplied with a copy of the manual to read in preparation for the next conference. The manuals are specially designed to be brief and comprehensive, and are clear and easily readable. In addition, pamphlets are issued from time to time on miscellaneous subjects of current importance such as the National Labour Relations Act, and the Wages and Hours Act. Separate brochures are also available to draw attention to new methods, cost reduction, and similar subjects. Perhaps the most comparable publications in this country are the shilling booklets for salesmen, issued by Herbert Casson, and it is a fact that many of the largest companies in America have taken advantage of this service. Other institutions, the best known of which is the National Metal Trades Association, publish training manuals along the same lines.

Firms not wishing to make use of these more expensive publications often resort to a selected manual, a copy of which is given to every foreman, some particular chapter being used as a text for the discussion conference, and being supplementary to it. Training at the American Cyanamid Company, N.J., for example, is based on Tead's Human Nature and Management and Lincoln and Prosser's The Employer, The Employee, and The Job.

The University of Michigan have recently drawn up a recommended "foremen's book shelf". This short list of selected

volumes includes—Schell, Manual for Executives and Foremen; Reitell, How to be a Good Foreman; Gardiner, Better Foremanship; and Smith, Psychology for Executives. In addition, two periodicals are available for foremen: Management Information edited by Glen Gardiner and issued weekly through the Elliott Service, and Supervision published monthly. There is no doubt that the provision of suitable textbooks and current periodicals, an ample supply of which is readily available in America, is a valuable stimulant in the preparation, upgrading and training of foremen, and provides the means whereby men can improve themselves.

As regards the training of conference leaders, the best methods for conducting meetings, the most suitable material to use, and the experience of other firms, an immense literature is available. The Federal Board of Vocational Education in Washington have issued a number of condensed and highly informative pamphlets, the information in which is most readily available in *Foremanship and Supervision*, a textbook written by Frank Cushman, a consultant in Vocational Education employed by the Federal Board.

It is not to be concluded from the foregoing that foremanship training in American industrial concerns always adheres to the use of published manuals, books, or pamphlets. Most companies plan their own programmes and make their own arrangements according to their immediate circumstances and requirements. Full details of the training procedures adopted by many of the bestknown companies in America have been made available by the Policyholders' Service Bureau of the Metropolitan Life Insurance Company, New York, in two booklets, Foremen Training Plans and Training Supervisors and Keymen. The Department of Manufacture of the Chamber of Commerce of the United States, Washington, D.C., have also issued an informative booklet on Typical Foremanship Programmes and Topics, which is a compilation of practices, mainly from companies conducting their own courses. A useful brochure has also been issued by this same department on Foremanship, containing a condensed statement of the experience of 126 industries. This forms a valuable expression of opinion.

A review of supervisory training experience was made by Allen B. Gates of the Eastman Kodak Company at the Seventh International Management Congress at Washington in 1938 wherein he summarised the programme content common to most American concerns as comprising:

- (a) The principles of organisation and management;
- (b) Personnel problems;
- (c) Cost control (effective use of equipment, materials and
- (d) Quality control (adherence to established standards); (e) Control of production (control of quantity and time accomplishment).

It should be noted, in comparison with British Foremanship, that where mass production has been established, the general tendency in America is to emphasise the aspect of supervision and its bearing on production, and to relieve the foreman as far as possible of all responsibility for technical and trade problems, with which the British foreman is so largely concerned, so that programmes of training would have to be modified to this extent.

41. Some Training Schemes

In the following brief description of the essential points to be observed in some training plans operating in America, the intention is to show the wide variety and the recent trends, rather than to give an account of typical schemes common to the large majority of concerns. Each firm, faced with its own internal domestic problems, seeks the best solution to them from a choice of many different arrangements, methods, and media available.

Some firms, in their training arrangements, tend to dismiss the formal training aspect and place the main emphasis on the solving of actual problems of operation. C. P. McCormick and Company, Baltimore, Maryland, have created Junior Boards of Directors, one for Sales and one for Production. The most qualified departmental executives are chosen to serve on this committee, which meets weekly, and is advisory in character. Ways and means of improving processes and operations are the chief function of the Junior Board whose members are changed from time to time at the discretion of the managing director. It is claimed that this arrangement accomplishes a great deal in the way of encouraging improvements, stimulating suggestions, training executives, facilitating promotional possibilities, and creating co-operation between colleagues.

Another arrangement of an executive character is provided in a description by the University of Michigan of a firm employing

5,000 men and 200 foremen, in which a deterioration of industrial relations was to be stemmed by the influence of the foremen. In this plant, regular foremen's conferences were held by the works manager on problems arising from the day-to-day operation of the business. The need for a better understanding between foremen and workmen in this case was achieved by the periodic value-rating of workmen on which wage rates were dependent. This work of man and job rating, which is finding wider application in America, was the piece of work set for the foremen to accomplish. It is acknowledged that where the foremen's training conference can be set a piece of work, or given advisory or executive powers, on problems of immediate urgency, a greater interest is taken by the foremen and the immediate benefit is more easily seen and measured.

The aspect of providing trained executive staff for future expansion is stressed in many American companies. The American Cyanamid Company, N.J., was faced with continuous development, their staff rising from 1,100 in 1925 to 3,800 in 1941. It realised from bitter experience that the casual selection of foremen from outstanding operatives often meant the loss of a first-class mechanic and the gain of an indifferent supervisor. The full effect of trialand-error methods of selection was emphasised when it found that, while promotion was one thing, demotion was something quite different. It was decided that there must first be sound and settled selection followed by intensive instruction. The company instituted evening classes of 25 meetings, of an hour-and-a-half each, held weekly directly after working hours, for the purpose of training new staff. Minimum requirements regarding education, experience and promotional possibilities were insisted upon, and no guarantee was given as to future appointments. In these classes 15 sessions were devoted to industrial relations; 5 to teaching technique; and 5 to social legislation, its interpretation and application. After the course, examinations were held to help in assessing relative merits for promotion purposes.

The already established foremen were trained by means of the conference method, the leader being supplied by the New Jersey State Department of Public Instruction, and this leader was given all essential material by the officials of the company. At the meetings, held fortnightly, trade union matters, job rating, and company policies, practices and procedures were discussed. Notes were taken

of the discussion, omitting the names of the contributors. The attendance of the directors or works manager was discouraged, as this deterred discussion. Interdepartmental visits were a feature of the programme, and the department foreman concerned explained the working arrangements, plans, policies, practices, procedures, and problems with which he was chiefly concerned. A good deal was claimed for interdepartmental visits because they showed what the foreman did and how he did it in terms easily understandable. In addition, the heads of such departments as purchasing, planning, production, progress, personnel, costing, wages, transport, and sales, described the purpose and working of their sections, showing how they fitted into the organisation as a whole and how they affected the foreman in particular.

The Murray Corporation of America provides experience of acquiring a trained supervisory force for rapidly expanding airplane-body sub-assemblies. This company, at the time employing about 7,000 operatives, received contracts in the summer of 1940 which required production to commence a year later, and in the course of the first year to build up to a strength of 10,000 employees. Beginning "from scratch", notices were posted and 800 applications were made for supervisory training. About sixty men were finally selected. The course consisted of practical shop work, mechanical instruction, technical lectures, supervisory experience, and leadership discussions (covering safety, wages, planning, material handling, manufacturing methods, quality control, and cost control). At the end of one year, the most satisfactory trainees were posted as required to the new factory.

The need to avoid permanence in the constitution, and monotonous consistency in the content, of conferences is emphasised in the majority of training programmes. While regularity of meetings and settled status are preliminary requirements, the chief danger to avoid is complacency of members and a routine regard for meetings. The Caterpillar Tractor Company of Pretoria, Ill., working on three shifts, has 26 conference groups each with about 15 members. The meetings, each of $1\frac{1}{2}$ hours duration, are held fortnightly during the working period. The groups are reconstituted every six months and there is a change round of conference leaders. It is claimed for this arrangement that wider co-operation and understanding are facilitated, and that promotional possibilities of foremen can be assessed on a broader basis.

The outstanding need to achieve uniformity of attitude and of methods of operation is a characteristic common in many large companies, especially those which have risen rapidly or which have a widespread organisation. The experience of the Household Finance Corporation has been described already. Similar ideas are to be seen at work in the Commonwealth Edison Company, Chicago, Ill., where 690 persons in supervisory positions received specific instruction in the President's Training Course, the purpose of which was to provide fundamental information regarding conditions involved in the operation of an electric utility company, the management and methods of the business, and the departmental policies and procedures. The advantages claimed for this programme are the broader outlook of departmental executives, and the uniform understanding and application of policy throughout the organisation.

While some of the larger concerns, such as General Motors Corporation and the Westinghouse Electric and Manufacturing Company, have embarked on schemes for general education covering aspects of general economics and general psychology, most of the smaller companies leave the broader issues to technical institutions and confine themselves entirely to matters concerning their own business. The programme at the International Business Machines Corporation, Endicott, N.Y., for instance, deals comprehensively in three sections with: The Factory and the Field; The Duties of a Supervisor; and The Prevention of Waste. Many companies, realising the advantages of general education and the value of intensive instruction with impartial treatment, tend to regard the training of foremen in the same way. Every encouragement, by way of paying fees and offering rewards, is made to employees who take courses and qualify at examinations in approved subjects at local educational institutions.

Methods of organisation or plans of training are not regarded as the copyright of individual firms. The attitude is neither one of secrecy nor of conservatism. On the contrary, there is complete openmindedness and a general willingness to contribute to the common good. In this way, firms starting a training programme can benefit from the actual published experience of others. An instance of this is found in *Training Solutions of Company Problems*, published by the National Industrial Conference Board, which surveys the supervisory programmes of six representative com-

panies, including McCormick, American Rolling Mills, and Eastman-Kodak schemes. A similar publication describes training programmes developed as a result of the National Emergency in 1940 under the title Selecting, Training, and Upgrading Supervisors, Instructors, Production Workers.

The review of numerous training plans certainly emphasises that there is no limit to the amount of information available, nor to the facilities provided for the improvement of foremen. A consensus of opinion shows that training should begin with matters concerning the every-day operation of the foreman's job, followed by the supply of information made available by higher executives, and broadened by explanations of company policies, to be still further elaborated by general educational considerations. For older foremen particularly, it is advisable to avoid any reference to "training", "school" or "education". For this reason the foremen's meeting, although organised, should not obviously conform to a connected, planned scheme, unless at the same time it is related to immediate practical problems. It is particularly necessary at the present time with older foremen of long experience, to train unobtrusively by suggestion. "Men must be taught as though you taught them not, and things unknown proposed as things forgot." Also, in similar vein, management is to be regarded as the gentle art of letting someone else have your own way.

The foremen's meeting should be arranged to accomplish business in the company's time, and at the company's expense, and not regarded as a further demand on the employee's leisure hours. Seriousness and sincerity should prevail. Work must be accomplished, and continuity assured only by improvement achieved.

In Great Britain there is a natural repugnance to the conference, which is usually regarded as an unjustifiable waste of time; the committee, whether permanent or temporary, advisory or executive, is viewed with disfavour as an instrument to invoke action. There is a dislike too, of anything which savours of educationally qualified executives. Yet foremen must assuredly be trained, and quickly. No doubt the secret lies in the choice of the right medium and the right method, the development of the competent conference method organised to achieve results; and this may involve some consideration for the more democratic regard for authority which, at root, appears to be the stumbling-block.

42. Conclusions

In view of the recently announced policy of the Ministry of Labour to foster the training of foremen by providing courses of lectures at the numerous technical institutions throughout the country, it is more than ever desirable to take the fullest advantage of the experience of American Industry in the past twenty years. Perhaps the most important conclusion is that foremanship training has been recognised as essential to industry and that, while the government department can play a valuable part in advising, providing material, and stimulating development, the fundamental work of training must be undertaken by individual firms as it concerns their own foremen. Admittedly, formal training given in technical institutions can be of great benefit, but its real value lies chiefly in preparing trainees and younger men, and in this sense should be regarded as supplementary to the more important internal conference.

That the foreman is being educated by experience in his day-to-day contacts is frequently contended and must be admitted. It is therefore all the more necessary to emphasise the difference between formal training conducted intensively and competently along definite lines, and the casual process of absorption with no better guide than the imitation of a superior; and to contrast the unrecorded costs of supervisory mistakes with the limited expense of foremanship training.

Training is not to be looked upon as a panacea for all ills, or a device to be treated casually as a new idea. As explained by the Advisory Commission to the Council of National Defence, "Where the problem is one of plant, equipment or finance, there is little that can be done through improved supervision"; but if better supervision will enable a greater use being made of existing production facilities, then training is entirely justified. That foremanship training is both essential and inevitable cannot be denied in such circumstances, and this is proved by its widespread adoption during the past twenty years in America where the business man, no less than in this country, does not waste time on things unprofitable. At the same time, it is not to be implied that every company in America has adopted foremanship training as a standard practice. One acknowledged authority estimates that about 50 per cent of the large corporations employing 3,000 people or more have established training plans, but with small companies employing 100 or more

people, only about 10 per cent are known to have plans in operation.

The purpose of training is to improve operational efficiency and to create better industrial relations. These aims are subject to continuous development and the training itself should be organised on this basis. Thus, with a view to long-term policy, progress should be organised and made the responsibility of a higher executive, either a director or the production or personnel manager. Perhaps the greatest single factor in success after the full and active support of the higher management, is the appointment of a suitable conference leader who need not necessarily be a high executive officer—in fact, as has been mentioned, the presence of a director or similar person tends to stifle discussion. Yet it is of the utmost importance that the upper executives be convinced of the value of training and determined to obtain the best possible results.

Larger American companies, especially those with a number of factories, frequently engage a specialist who spends his full time in securing and preparing the necessary material, in conducting the conferences, and in following up profitable recommendations. Other firms, recognising the importance of the right type of conference leader, the difficulty of appointing anyone from their existing staff, and the expense of engaging a full-time specialist, often resort to the services of a consultant who undertakes the whole training programme in close collaboration with the company concerned. This measure has obvious advantages in that the company benefits from the widest possible experience of specialists. Such services are available at present in this country in small measure, but this, no doubt, could easily be rectified. On the other hand, a full knowledge and some experience of the individual company's plans, policies, procedures and problems by a full-time employee of suitable type and position, is not to be under-estimated.

Having established the need for training, and the importance of a definite, pre-planned and properly organised programme, it is necessary to examine the material and methods of conducting conferences in order to secure the greatest success. In the first place, the group should be carefully selected so as to avoid the conflict of authorities and so that each member considers himself a privileged person. Wherever possible, meetings limited to one and a half hours should be at regular intervals, either weekly, fortnightly, or monthly, and should be held in the company's time and on the

company's premises. The subjects for discussion should be properly prepared and notes issued beforehand, if possible, in sufficient time for the members of the group to give the subjects detailed consideration. Discussions should concern immediate problems rather than future possibilities, and they should be practical rather than theoretical. Conferences should set out to do a certain piece of work, to reach definite conclusions, to make sure that each member understands the value of the decisions and that they are put into immediate effect. Above all, it is necessary for the foreman to consider the meetings to be of substantial benefit, and he should not regard them as a waste of time. If the conferences can be acknowledged as advisory committees, where the recommendations reached are referred to the management for consideration and adoption, then so much the better. Of course, if foremen's meetings demonstrate the promotional possibilities of certain members, and this leads to better positions for them, advantages will accrue all round.

Training by the conference method should raise the standard of foremanship, improve the status of the lower executive, and lead to a better understanding of the supervisor who not infrequently works under almost impossible conditions. Even with the onrush of greater and greater expansion, with widespread adoption of methods of mass production, and the concentration of functional control by specialists, the foreman can and does play an important part in departmental efficiency. In spite of the growth of labour legislation, the universal acceptance of national agreements, the general tendency to higher wages, the drive for better working conditions, and the common practice of maintaining a centralised labour department with a specialist in charge, it cannot be doubted that real industrial harmony depends greatly on the capability of the foreman. This fact is widely recognised in the United States in spite of the vast volume of legislation now governing the relations of employers and employees. The workshop is the fundamental factor in productive efficiency, and although machines and materials are vital, their full use can only be achieved by men, the successful organisation of whom is to be determined by the foreman in his effort to reconcile maximum production with contentment within the working force.

It should be clearly understood that the main factor in management is the man as an individual, and that successful training commences with the careful selection of suitable staff for definite and specified jobs. Training will cost both time and money, and

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noticeable results will not be achieved overnight. While the adoption of this policy is to be regarded as an investment in the supervisory organisation, with certain profitable repayment, the selection of the right men, methods, and material, can greatly expedite results.

Education in America is not an end in itself but a continuous process, where the formal instruction of the classroom concludes with the beginning of informal self-training, to make men think for themselves. Success is achieved where each man not only continues to be eager to learn, but is also willing to teach and anxious to apply his learning. Training should fulfil two conditions: it must be useful and practical; and it must inspire the desire for self-improvement along well-established lines towards a clearly defined goal. Generally, where these aims have not been accomplished, the tendency usually is to blame the trainee, whereas in America failure is accepted as the responsibility of the training process. Above all, it is consciously recognised that the industrial future of to-morrow is being determined by the training process of to-day.

This does not necessarily imply that American methods are better, by and large, than those practiced in Britain. It is to be observed in America that business development is more rapid, more initiative is displayed, experimentation is greater, new methods are more quickly adopted, promotion is swifter, and reorganisation is undertaken more frequently. On the other hand, conferences are far too common, the harmony of industrial relations differ greatly, and technical skill is more sharply divorced from supervisory capacity. Yet, whatever the pros and cons of American business methods, they demonstrate valuable practices and experiences from which British industrialists and their employees can profit, and foremanship training appears to be one of them.

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SECTION VI

FOREMANSHIP DEVELOPMENT IN GREAT BRITAIN

A. NEED FOR DEVELOPMENT

43. Conditions

The term "development" as here employed includes all those special features for helping older and existing foremen to improve themselves, as well as the more commonly known methods for training younger and prospective supervisors. Foremanship, it should be explained also, is meant to comprise all those of either sex who exercise executive authority, and who rank between the management and the workmen (or women), whether regarded as superintendents or supervisors, overseers or charge-hands. Before development can commence, it is necessary that certain fundamental conditions should be accurately appraised.

First and foremost, employers must appreciate the nature and significance of executive work. It is common in manufacturing concerns to concentrate entirely on technical processes, so that men are regarded as competent or otherwise in terms merely of their theoretical knowledge and practical skill. Thus, if a man is a good engineer he is regarded, ipso facto, as a good foreman or a good manager. It is inferred that organising ability, commercial capacity, and aptitude in managing workpeople is the mere exercise of common sense to the technician, and requires neither special instruction nor particular qualities. Consequently, the foreman is pitchforked, on appointment, into a type of work for which he may not be suited and for which he has received neither preparation nor guidance. Closely associated with such conditions is the contention that managers and foremen, like leaders, are inevitably born and not made. This accounts for appointments where the loss of a good workman becomes the gain of an indifferent foreman. It is a first condition of foremanship development, therefore, that executive competence be appreciated as highly important to the success of an organisation, and as requiring both specialised ability and training.

Secondly, it is to be accepted that efficiency in any industrial

undertaking depends on the proficiency of its personnel. Successful management is ultimately determined by the ability of the foremen, and the way that ability is applied in the daily execution of their jobs. Competent and experienced staff must be fully recognised as a valuable, and indeed indispensable, factor contributory to the company's present and future well-being.

Thirdly, as a preliminary condition of development, the foreman should be regarded as the central figure in workshop efficiency. It is important to recognise the immense personal influence exercised by the foreman over operatives and their productive capacity. In view of the limited guidance and instruction usually given to the foreman, which leave it largely to his own initiative to get the best possible results, it is more than ever necessary to ensure that he is capable of carrying out the policies and plans conveyed to him without constant and close supervision.

Fourthly, it is essential to recognise that the standard of foremanship can and must be improved. There must be widespread belief in the efficacy of suitable training. In this connection, it is important to point out the substantial strides made in recent years to improve the professional status of management. Not only have increasing numbers of managers received some formal training, but the development of managerial technique has been assisted by the enormous growth of specialists in planning, time study, labour control, and associated subjects. It is reasonable to suppose that, if managers can be improved, so also can foremen; yet until recently the training facilities available for managers have not been made available to foremen to any large extent. As a result there is an ever-widening gap between the up-to-date management and the neglected foreman. Moreover, the benefits to be derived from improved standards of management are only partly effective if the staff of supervisory rank are unable to appreciate and carry out the plans and policies prescribed, or to use effectively the machinery devised for departmental control.

Fifthly, foremanship development must be accepted as the full responsibility of the higher management. It is the duty of the directors to ensure, and the task of the managers to plan for, the continuance of profits in the future. A company must be constantly aware of competition and of the need for a possible extension of activities and the continuous reduction of costs. It is necessary to foresee also the trend of organised labour and the need for more

competent supervision. Directors must be determined to invest in executive staff as an industrial asset which will enable and ensure, as far as possible, the certainty of profits. Managers, with their power to promote or disrate, retire or replace, encourage or discourage, the foremen, cannot evade the full responsibility for development.

Lastly, it is necessary to realise that successful training can only result from a suitable selection of trainees. If either established foremen or prospective supervisors are recognised as unlikely to improve under, or respond to, training, it is better to face this fact at the outset so that time and money are more profitably spent. It is possible in some cases that replacements must receive prior attention.

44. Purpose

The primary purpose of foremanship development is to improve the foreman's administrative ability. The aim should be, by adopting a form suitable both to the industrial circumstances and to the type of person concerned, to raise the general standard of ability. Better supervisory performance is to be achieved through improving the powers of observation and developing the capacity for industrial reasoning. Those authorities in this country who have given special consideration to foremanship, agree that, fundamentally, the root cause of poor supervision is the low standard of education and narrow outlook commonly prevailing among foremen. It is not lack of experience, but the inability to profit from experience, which gives the greatest cause for anxiety, for while the latter endures there is no hope for eventual improvement.

In industry, identical information concerning a problem frequently confronts workman, foreman, and manager alike, but what distinguishes, or ought to distinguish, the respective grades, is the interpretation, and consequently the solution, of the problem. After all, with most workshop and factory problems of practical and everyday character, successful solutions are not found in text-books or obtained by following a set formula, but are arrived at through the ability to see what is wanted, to reason out the best thing to do, and to get it done. Without expanding this aspect further, it can be said that what British industry requires of its foremen is straight thinking, straight talking, and straightforward action. From the nature of executive work, it follows that, if the foreman is given no particular training, there is likely to be little, apart from the power implied in authority, to distinguish him from

those he has to supervise, and this is more especially pronounced when he has been raised from the ranks.

In raising the general ability of the foreman, it is implied also that development of character will take place to permit a more open-minded and detached view of personnel problems, so that progress and encouragement may replace prejudice and pettiness. The purpose of development is to get men out of a rut, to stimulate them with new ideas and a new outlook, and to suggest new methods of approach and new systems of operation. Foremen must become more receptive and more adaptable; they must be confident of their ability in order to inspire confidence. In management it is the man that counts most. If he has ability and can apply it, if he has personal influence and can use it beneficially, and if he knows what is wanted and can get it done—that is much more important than anything else.

Apart from these general and fundamental aims in developing the foreman's efficiency, it is also necessary to acquaint him, through the discussion of concrete problems, with the principles and practice of supervisory control. By various means it is possible to instruct the foreman in the systems, methods, and devices of operation. When he becomes familiar with the reasons underlying production methods, as well as with the details of them, there is a greater possibility that he will regard routines as tools facilitating supervision, rather than as instructions to be followed blindly. Then too, by discussing with him proposed improvements before they are issued as definite orders, there is every likelihood both of obtaining valuable suggestions and of overcoming resistance to change; for one of the innate purposes of foremanship development is to stimulate a progressive outlook, to engender a spirit of enthusiasm for improvement, and to keep the foreman advised and up-to-date on current affairs.

Although it has been universally thought unnecessary, hitherto, the idea is rapidly gaining ground that a full explanation of social and economic changes as they affect the particular company, and of their bearing on new labour policies and new production methods, is both beneficial and inevitable for many reasons. From such an explanation follows the opportunity for foremen to discuss problems of practical and uniform application. As the result of frequent and profitable discussions, the foreman learns what is required of him, his self-confidence grows, his status is improved, and his personal

influence is extended. The primary purpose of foremanship development is to help the foreman himself to make the right decisions, properly and promptly, as though by second nature.

The results to be expected from the adoption of suitable means for foremanship development can be summarised as:

- (a) Better understanding between management and foremen;
- (b) Improvement in the executive capacity of the foremen;
- (c) Higher production and more teamwork from the operatives.

It is important to set down clearly the purpose to be served by foremanship development, and it is therefore relevant to state briefly the objects of the training scheme adopted by a large company with 80 foremen. They are:

- (a) To transmit the Company's policies and plans;
- (b) To broaden the outlook of the foremen and make them more receptive to new methods of management;
- (c) To improve the standard of supervision—industry now demands a higher performance from each individual but this can only be achieved by good foremanship;
- (d) To improve labour relations by instilling in the minds of the foremen that the best results can only be obtained by leading as opposed to driving.

Another large company, in contrast, have preferred to confine themselves to two general and interrelated aims—Leadership and Cooperation—which might well serve as the ultimate purpose of foremanship development.

Following the lines adopted by The British Association for Commercial and Industrial Education in drawing up their 1922 and 1928 Reports on "Education for Foremanship", a questionnaire was employed to obtain details of present practice. It was sent to about one hundred firms known, or thought, to have adopted training arrangements of one kind or another. The possible sources of information having been thus selected, the usually enlightening statistical analysis would be misleading in this case, except that it emphasises that comparatively few firms have treated the problem with anything approaching thoroughness; that (and possibly because) a wide variety of measures have been adopted, with little uniformity or standardisation; and that, although a deplorable apathy has existed, there have been signs in recent months, no doubt

as the result of war conditions, of a sudden awakening to the importance of competent foremanship. While a few companies had found in the war grounds for discontinuing their arrangements, many others had, for the first time, realised the importance of foremanship, and in consequence adopted means to develop their foremen's qualifications. Although a number of progressive companies gave full permission for their names to be used in connection with specific methods, the majority have preferred to remain anonymous. Therefore, in order to preserve uniformity, names of companies were not mentioned in the reports.

For the purpose of general consideration, foremanship development might be conveniently regarded from two aspects: first, improving older and established foremen; and secondly, training younger and prospective foremen. These may be regarded as two distinct problems, differing chiefly in that, whereas the experienced foreman is best improved by measures taken internally by the company concerned with its own staff, the younger and less experienced foreman is best trained intensively by outside educational institutions having specific courses. It does not necessarily follow that the older foreman should not attend classes held under the direction of outside authorities; indeed, with the growing frequency of courses arranged in connection with civil defence, the prejudice of older men against lectures ought rapidly to diminish, provided they meet there other men of comparable age, experience, and status. Some of the larger companies carry out their own educational work within their own premises and bear the entire cost.

However, the separation of foremanship development into two chief considerations is useful in distinguishing the differing methods employed, so long as it is borne in mind that younger foremen can and do attend conferences held by the company and that older foremen often attend courses at technical institutions. The important point is that the company must acknowledge and accept full responsibility for the development of its supervisory force, and, therefore, must select and prescribe those methods best suited to its individual requirements. Whether such activities are confined to internal conferences, or enlist the facilities of the technical college, the responsibility for training foremen rests entirely with the company concerned. Training should not be left haphazardly, as in the past, to the inclination of those wishing to improve themselves, but should be regarded as the privilege of those chosen to be

trained. While promotion to the rank of foreman should not be possible without proper training, there is no need to offer or promise promotion as an inducement to training. It is far better for individual companies to select their trainees from among suitable applicants, and then proceed to prescribe the intensive course most likely to meet their specific requirements.

B. IMPROVING OLDER AND ESTABLISHED FOREMEN

45. Preliminary Considerations

Before proceeding to outline the practical measures to be taken in promoting a higher standard of foremanship, it is as well to review briefly those general considerations which govern the vocational education of adults in industry, especially of those older persons with many years of trade experience and supervisory responsibility. It must be remembered that most foremen have received little formal education, scientific instruction, or systematic technical training after leaving the elementary school. In many cases, the older foreman has picked up his technical knowledge and developed his supervisory capacity by a process of trial and error in the day-to-day execution of his job. Experience gained in this way can be most valuable, but it is acquired only slowly, and over a long period, and in these days may quite easily become out-of-date. The guidance and correction of the foreman depends on his superior's management, which may be wise and progressive, close and exacting, narrow and interfering, or merely vague and unhelpful. However, whether the foreman is inadequately or competently supervised, the important thing is that as his years of experience increase he is inclined to become self-satisfied and complacent; he becomes prejudiced; resents new ideas, and presents a stubborn resistance to change. Strangely enough, in the lower ranks of industry there is a universal belief that promotion means less work, so that foremanship is sometimes looked upon as a sinecure.

It constantly falls to the lot of the management to bring the supervisory force up to date, either by jolting out of positions those who fall too far behind, or by prodding those who do not keep ahead of the changing circumstances. Foremen must be subject to some form of continuous but reasonable stimulation, and in view of the positions they hold, and their existing experience and capacity, this must be brought about along the lines of modern teaching and

industrial development by means of suggestion and persuasion. The chief general considerations in the application of these methods can be summarised as follows:

(a) The person who instructs must be respected as being practical, experienced, and competent.

(b) The subject matter of the instruction must be essentially practical, dealing with known jobs.

(c) Any proposals made should concern current problems and be subject to immediate application.

(d) Instruction should be stressed as being of practical and immediate value, so as not to be regarded either as a waste of time or as only remotely practicable.

- (e) Procedure should pass from the known to the proposed; from the simple to the complex; from concrete practical examples to general operating principles, such general rules and regulations being imparted by full explanation of applications and their limitations.
- (f) The presentation should be intensive, and confined to small groups of comparable age, experience, and status. Sessions should be short with limited but definite problems for discussion, followed by concrete conclusions.
- (g) Instruction should be definite and specific; clear and brief, with plenty of practical illustrations and diagrams where possible.
- (h) A planned programme should be drawn up for each meeting, and a series of meetings should be arranged which should be pursued progressively according to plan, whether the plan is disclosed or not.

(i) The method of approach should be by way of drawing out suggestions and persuasion rather than by forceful aggressiveness.

(j) Decisions should appear to arise from discussions, whether between individuals or out of a group, so that those giving effect to them may appreciate their responsibility.

(k) The chief aims of training are to develop individuality; to create self-confidence; to impart better habits of work; to improve powers of observation; to generate openmindedness, receptiveness, and adaptability; and to instil cooperation as the foundation of teamwork.

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(1) The cost of training cannot be avoided and those responsible should be clearly convinced of its worth, being prepared to expend time and patience so long as results justify the expense.

With these leading considerations clearly in mind, the chief methods for developing the older and more experienced foreman originate, first, in day-to-day contacts on the workshop floor, and secondly, in conferences between the management and the foreman. As both methods become more general, there are unmistakable signs of better understanding of current problems, and closer mutual collaboration in their solution.

46. Contact

Foremanship development must necessarily begin with a clear view of the aims to be sought and the results to be expected. Whether the method is formal or informal; whether the process is by contact or conference; whether the arrangement is regular or spasmodic; or whether the programme is pre-planned or freely developed; the purpose of training should be determined specifically and in accordance with the precise needs of the company. While it may be thought desirable to improve the general standards of foremanship, this is not to be achieved through a general, haphazard, and un-co-ordinated programme. There must be a conscious plan with a specified piece of work to accomplish.

It is true that some degree of foremanship development is constantly going on in every industrial organisation, but, unfortunately, it is usually limited to the accumulation of experience gained in the day-to-day execution of the job. Experience obtained in this way may be restricted and may have less and less meaning as the years go by. Where there is no conscious effort to use or profit from experience, and no positive striving after improvement, development is at its lowest ebb.

A review of British Industrial practice reveals certain marked characteristics:

- (a) A preference for improvised procedure as contrasted with organised planning;
- (b) A dislike of definite training arrangements, whether for staff or operatives;
- (c) An inherent objection among older men to receiving any formal instruction, whether by lecture or reading;

- (d) A fundamental aversion from committees, conferences, or meetings of any kind, which are regarded as time-wasting devices:
- (e) A complete lack of belief in the resulting improvement of either of individuals or groups;
- (f) An absence of enthusiasm for development generally, and a failure to encourage men individually. No doubt this prevalent lethargy accounts for the slight recognition so far given to the foremanship problem in Great Britain. Yet, both economic and social changes are so persistent that the issue cannot be longer delayed, and must be met with the urgency and thoroughness which the problem merits.

In view of the prevailing features which characterise British industrial organisation, the more flexible and less systematised method of foremanship development through day-to-day contacts in the workshop is likely to find wider acceptance and to prove more beneficial, especially as a first step, than conferences, whether formal or informal. With what might be termed the contact method of improving foremanship, any and every occasion should be used to educate by various means the supervisory staff responsible for departmental control, commencing with a clear-cut policy of what it is intended to accomplish generally, and adding to this those further requirements indicated by individual deficiencies. Such a policy might include a general improvement in quality of workmanship, a speed-up of production, and a stricter control over it, and better industrial relations. The higher management, including the works manager and functional specialists, should then use those occasions which arise every day to explain the reasons for policy and instructions, suggesting lines along which these might be put into immediate practice. Instead of giving instructions as orders to be carried out without question, a little more time is taken to explain the instructions and to make sure that they are thoroughly understood and accurately followed, with the object of creating a closer collaboration between the higher and lower grades of management, so that teamwork can be developed on a basis of a mutual understanding of the company's requirements and practical difficulties.

At the back of the minds of those who carry out the policy of development, should be a conscious intention to encourage a standard of foremanship which more truly represents the com-

pany's requirements. As is so well known in industry, it is not so much what the directors decide, but the way in which those decisions are transmitted to the foreman, and the way in which he conveys them to the operative, that really count. The diminishing effectiveness of executive arrangements as decisions pass downwards through the organisation often accounts for the poor reception of good intentions.

Although the contact method of development takes longer than the method of conferences, since each policy must be explained separately to each individual, the circumstances might favour and the results justify this process as a preliminary to the foreman's conference or as a supplement to it. The contact method uses discussion between the management and the foreman as the medium, with explanation, suggestion, and persuasion as the line of approach, each concrete problem being used to emphasise the right solutions and to point out errors of judgment. Instead of using departmental mistakes as an excuse to bully the foreman, and to lower his status, the correction is used as an example to demonstrate better methods and to prevent repetition by giving explanations and building useful experience. Clearly, it is the full responsibility of the higher management to secure complete understanding among subordinate staff by defining the scope of individual authority and thus preventing friction.

Foremanship development by the method of day-to-day contacts commends itself particularly where relations between management and subordinate executives have been unsympathetic, un-co-operative, and unsatisfactory. Where it might be considered inadvisable to plunge immediately into full-scale intensive training conferences, this more modern policy is best accomplished gradually, but continuously, especially where the management and supervisory personnel remain unchanged, by means of improving day-to-day contacts. An educational process which attempts to establish a fundamental change in outlook will take some time to effect, more particularly so if it is applied to men with fixed habits of mind acquired over many years of apparently satisfactory supervisory experience.

47. Conference

With the contact method of foremanship development, any and every occasion is used to improve the foreman's attitude to his job,

to raise his standards of performance, and to convey the company's plans and policies. Although this method is likely to be more certain in that it affords complete flexibility according to individual differences, it requires a considerable amount of time, especially where the number of foremen is large. As an alternative to the contact method, and supplementary to it, the conference is employed, because it saves time, makes for uniformity of understanding and application, and stimulates co-ordination by promoting general discussion.

It must be admitted that the conference is a method not highly regarded in British Industry as a means of effective action; partly because of the belief that authority, in the industrial hierarchy, is incompatible with discussion, and partly because it is assumed that the conference is necessarily associated with uncontrolled expression of opinion. But where the tone of industry has moved from the dictatorial to the democratic, where action results more from compromise than from compulsion, and where persuasion replaces aggressiveness, the conference method becomes a necessary innovation that must be accepted as an essential instrument for effective group action. A foremen's conference is a means for accomplishing a definite piece of work, namely securing co-ordination, and collaboration. It is a procedure which facilitates quick and easy dissemination of new policy and new instructions, promotes common understanding, and makes for uniformity of application.

As with other devices of organisation, however, certain conditions must be observed if success is to be ensured. First, the work to be done by the conference must be regarded as important, and not as superficial or time-wasting. This implies that the conference must receive the active support of the board of directors, and that the management must be convinced of its value and determined to persevere until results are obtained. Any recommendations or suggestions resulting from the conference should receive serious consideration and, if adopted, should be put into force without delay. If it proves necessary to reject such suggestions, a full explanation must be given of the reasons prompting the decision.

In the second place, the conference should be well arranged and competently conducted; while permitting the utmost flexibility for relevant discussion, it should conform to a pre-arranged plan and proceed accordingly. Careful planning implies adequate preparation, and it is frequently this unseen and unadvertised work which

decides the success or otherwise of a conference. The subject for discussion must be selected with care, as being interesting and of immediate practical use, facts or figures used should be verified for accuracy, and illustrations should be apt.

Thirdly, the personality of the chairman or leader of the conference is of immense importance in guiding discussion and getting results. Teaching in general is a specialist occupation, but training adults by conference methods calls for qualifications which are particularly rare. It should be recognised that neither a position of authority nor undoubted technical competence necessarily implies the ability to convey meaning clearly, or the power to stimulate interest. The person chosen should either be trained, or be manifestly competent in conference-leading. In certain cases even the employment of an outside specialist may be justified.

Finally, the conference group should consist essentially of those of similar rank, otherwise there is an ever-present danger of stifled discussion. Experience shows that it is unwise to have present such highly placed officials as directors, as this prevents those of supervisory rank from giving free and clear expression to their opinions. It is also considered advisable to limit the size of the conference to which is assigned a particular piece of work, so that each member may have sufficient time to make comments should he wish to do so. In practice, foremen's conference groups are best limited to not more than fifteen members, even if this means the formation of more than one group.

As the result of the questionnaire previously mentioned, which was sent to about one hundred companies of repute well-known for their progressive outlook, it can be stated as representative of practice in Great Britain that consciously planned foremanship development is practically non-existent; that conferences are the exception rather than the rule; and that resort to technical institutions, although increasing, is by no means universal. A review of present practice and current trends may be beneficial, therefore, in suggesting the lines along which new projects may be developed.

Conferences fall into two classes, which may be described as specific and general. In the specific type of conference, the subjects dealt with are confined to practical and current issues pertaining to the domestic problems of a particular company. In this case, which is by far the more common as well as the more important, new policies and procedures, new methods and materials, and new

processes and devices are discussed as they affect various departments. In the general type of conference, which is less frequently found in British Industry, prepared material in the form of a lecture, report, book, or notes is discussed with a view to the adoption of useful suggestions, or in order to improve and broaden general industrial outlook, or both.

Specific conferences are characterised by being held in the Company's time, by being confined to works problems, relating to production and personnel, by being led usually by director, works manager, or some departmental executive, and by the selective nature of membership. With only one or two exceptions, where internal conferences of foremen have been started they have continued regularly and without a break for periods up to twenty years. The usual practice is to set apart a suitable period, say between 4 o'clock and 5.30 on a particular weekday. The majority of companies with long experience of conferences have decided on monthly meetings, although a few hold weekly meetings and others favour spasmodic conferences, arranged as circumstances demand. While many concerns have specified a meeting period of one hour, the average displays a preference for one-and-a-half hours. Some permit a period of up to two hours, but this is regarded as the limit.

Large companies with many foremen have the option of bringing them all together in a common conference, or dividing them into groups more convenient for intimate discussion. Where concerns with fifty or more foremen have adopted the practice of holding only one conference, normally led by a director or the works manager, the purpose is to disclose and disseminate new policies and new general procedures. Discussion is necessarily restricted, and the use of the large conference, which usually occurs spasmodically, is chiefly with a view to economy in time. Where useful work is to be done by the group, the general practice is to restrict the size of the conference to fifteen foremen or less. Depending on the purpose to be served, groups can be arranged according to manufacturing division; on the basis of process similarity or connection; by reason of physical location and convenience; by shifts where these exist; or according to the subjects to be discussed. In all cases, the management decides the size, constitution, and frequency of the meetings. Where new processes or new systems are to be introduced, it is common to set up an ad hoc

body of the foremen most intimately concerned, which meets as frequently as the urgency of the problem requires and is dissolved when the work is completed.

A special arrangement occurs in a large factory where four Advisory Panels have been set up to deal respectively with Factory Problems, Production Control, Personnel, and Mehods of Pay. The chairman of each Panel is the appropriate departmental head. In the case of Factory Problems, the chairman is the assistant works manager; for Production Control, it is the production manager, and so on. The whole of the foremen and charge-hands (about fifty) are divided between the four Panels. They meet as frequently as they desire, consider any relevant problem under their group title, are at liberty to call in any member of the staff to assist with information on particular points, and can formulate recommendations for the consideration and decision of the management. In order to co-ordinate their work, the four Panels have the same secretary who attends all meetings, records and circulates the minutes, secures any information that may be required for meetings, and follows up the results arising out of earlier recommendations adopted and put into operation. It is clear that the secretary plays an important part in the smooth running of the scheme. Anyone in the factory who has any point to raise can refer it to the appropriate Panel. All meetings are held in the company's time, not less frequently than once a month but usually according to the urgency of the problem, and the meetings last about an hour.

It is the general practice of foremen's conferences in Great Britain to be led by a senior executive—managing director, works director, or works manager. Where smaller groups of foremen meet together, it is usually their immediate superior or some higher authority who acts as chairman. Although this practice restricts to some extent the free expression of opinion, it has the advantage of lending importance and authority to the conference. Among those eompanies which have established conferences, the practice generally is to avoid long detailed programmes, and to select subjects according to their importance at the time; but making current problems the subject matter of discussion does not, or should not, imply lack of preparation for each meeting, and thoroughness in this direction is, in fact, an important factor in assuring success.

The selection of the subject-matter dealt with at conferences depends on whether the intention is to follow a prepared course of

general instruction or to discuss problems relating to the organisation of a particular factory. A few examples may be quoted. One general course of instruction provides separate discussion meetings for the following, among other subjects:

- 1. Maintaining the Working Force.
- 2. Training Workers on the Job.
- 3. Eliminating Irritations.
- 4. Modern Personnel Practice.
- 5. The Care of Equipment.
- 6. Efficient Department Layout.
- 7. Planning the Work.
- 8. Maintaining Quality Standards.
- 9. Wage Incentives.
- 10. Cost Reduction.

Another company, framing its specific problems against a general background, arranged the following programme course which was conducted by one of its executives:

- 1. The Foreman's Position and Function in Industry.
- 2. The Labour Policy of the Firm.
- 3. Cost Control, which includes materials and wages.
- 4. Quality Control and the Elimination of Waste.
- 5. Planning of Work.
- 6. Leadership and Principles of Handling Men.
- 7. Safety.
- 8. Good Housekeeping.

A third company, at an initial series of conferences, arranged ten weekly meetings during the early part of 1942, covering, among others, the following subjects relating to their company practice, each being dealt with by the appropriate departmental executive:

- 1. Financial and Commercial Background.
- 2. Planning and Ordering.
- 3. General Factory Organisation.
- 4. Assembly and Inspection.
- 5. Incentive Methods and Rating.
- 6. General Policies of Personnel Management.
- 7. Some War-time Problems.

A fourth company has operated for the past three years a Works

Council, consisting of foremen who meet regularly every month. The following is a typical agenda:

- 1. Departmental Output Efficiencies.
 - (a) Order of efficiency for the months of September and October 1941.
- 2. Progress of Orders.
 - (a) Production Department working.
 - (b) Complaints.
 - (c) Increased Production.
- 3. General Routine.
 - (a) Letters to Foremen.
 - (b) Overtime and night working.
 - (c) Timekeeping.
 - (d) Time wasted in lavatories.
 - (e) Factory supervision. (Starting and stopping. Foremen's hours.)
 - (f) Maintenance—repairs to machines.
 - (g) 7-day week.
 - (h) Foremanship Training Course.
- 4. Cleanliness.
 - (a) Cleanliness of shops and machines.
 - (b) Scrap boxes.
- 5. Suggestions.
 - (a) Labour questions, welfare, and supervision.
 - (b) Safety measures.

In pre-war days, some companies took the opportunity afforded by foremen's conferences to indicate selling plans and problems, by including in the group those members of the staff responsible for marketing and those concerned with manufacture, and such conferences might be addressed by the sales manager. Subsequent meetings would then be devoted to production problems and personnel aspects arising from the new selling policies and programmes.

Although a few companies have found in the war an excuse for dropping all training measures and conferences, others, not previously interested, have found meetings with foremen essential and invaluable in ensuring a common understanding of the new production requirements and the new regulations for controlling labour. The rapid succession of Government Orders regulating the supply

of materials and the employment of labour has shown the desirability of giving clear, simple, and concise explanations to those responsible for carrying out instructions. The changing character of labour conditions has made it more than ever necessary to have a common policy, a uniform practice in execution, and a standard of supervision fitted to the times.

The second type of conference is the general and more formal meeting, which has the lecture as its backbone. These conferences differ from the specific kind outlined above in that they are usually held outside normal working hours, although every facility is given by the company in providing accommodation and financial support. There is no attempt to accomplish any specific piece of work; membership is restricted to staff and foremen; and attendance is optional. Such meetings might comprise the whole of the supervisory force of a large company, or might be confined to the relatively fewer foremen in a smaller concern.

In some cases the formal conference is arranged by the Foremen's and Staff Association, where this exists. According to local circumstances, the meetings commence either immediately after a centeen tea interval following the normal closing of the works, or after the foremen have had time to go home and return. Such meetings can be partly of a social character, and permit a good deal of flexibility in constitution and conduct. The chairman not infrequently is a foreman elected by the group, or taking his turn in rotation. The directors and higher grades of management may or may not attend these meetings.

General conferences can maintain an active interest by resorting to a wide choice of alternatives in speakers and subjects. For instance, one company arranged last year for the head of the Management department of a local technical college to give a series of lectures on various aspects of modern foremanship. Another planned ten weekly lectures, each given by an executive of the company on such subjects as Commercial Policy, Planning, Organisation, Process Manufacture, Inspection, Incentive Methods, Labour Management, and War-time problems. Yet another has recently taken the opportunity afforded by the presence of a visiting consultant to have him explain in a series of talks both in general terms and in specific application, the type of work on which he specialises, such as time and motion study, planning, labour management work, simplification, and costing. In this way, at one and the same time

objection to the consultant is minimised, and the best use is made of his services.

The purpose of the general type of conference is to broaden the foreman's outlook on industrial and company problems, to develop his social status, and to encourage friendly understanding and collaboration between supervisory executives. In addition to serving the requirements of the older foremen, such facilities might also be made available for selected trainees. Conferences differ from classes held in technical institutions in that they are supported by, and exclusively restricted to, the foremen of a particular company. They are less formal, and are particularly suitable for the older type of foreman who would resent attending regular lectures with men a good deal younger and less experienced.

C. TRAINING YOUNGER AND PROSPECTIVE FOREMEN

48. Lecture Courses

While the conference method is, without doubt, the best procedure to follow with older and more experienced foremensay over 35 years of age—the lecture-conference and case method of instruction is particularly suitable for the intermediate age-group between 25 and 35, with some experience but with limited educational background. For those below 25 years of age, the lecture course of intensive instruction is likely to achieve the best results since this age-group is best able rapidly to respond to and assimilate information from formal lectures. Although there is no real reason why older foremen should not attend courses of instruction on foremanship, the chief objection is one purely of personal prejudice against "going to school". It is to be admitted that in Great Britain generally there is neither great demand for adult education nor any great belief in it, except that which is attained by practical experience, and foremen as a class form no exception to this attitude. More striking too, is the estimated number of students taking formal courses in management, which, based on population, gives the comparative ratio—Great Britain 1; Germany 5; United States 7. However, in view of the present enormous use of intensive courses of instruction in the fighting services and in civil defence, the hitherto prevailing prejudice against teaching after the elementary school stage may be materially reduced.

Education for management ¹ must necessarily precede rather than follow improvement in foremanship. The first courses in Industrial Administration in Great Britain were arranged in 1920 by the Manchester College of Technology as a full-time course suitable chiefly for post-graduates. From these pioneer beginnings, other centres adopted arrangements for training in management, and in 1926 a two years' course was provided by The Polytechnic, Regent Street, London, for evening students. Shortly afterwards, in 1928, The Institute of Industrial Administration prescribed a standard syllabus, set standard examinations, and admitted those who qualified to membership in the various grades.

Foremanship Training was introduced in 1920 at the Manchester College of Technology with a course of six evening classes for Engineering Foremen and Supervisors, conducted by Professor Dempster Smith, which covered workshop organisation, layout of machines, and other similar problems of particular interest to engineers. Although occasional lectures were given in Foremanship at various centres from time to time, no real attempt was made to set up a complete course until 1933 when The South-East London Technical Institute announced a series of fortnightly meetings to train foremen by the case method. The first few years were regarded as experimental, both in the method and in the content of the course. The case method procedure was quickly abandoned in favour of formal lectures interspersed with, or followed by, discussion. Mr. T. H. Burnham, head of the Management Department and lecturer at this Institute, set out the aims of the course as follows:

- (a) To develop the foreman's character and latent powers of leadership;
- (b) To increase his personality and lift him out of mediocrity;
- (c) To increase his self-confidence, poise and intelligence;
- (d) To enlarge his perspective of responsibilities and opportunities, and to get him out of ruts and blind alleys by pointing out the obvious opportunities;
- (e) To indicate the close relation and interdependence of industrial problems, and thus develop the will to co-operate;
- (f) To instil an interest in the life of a greater organism than in the person alone, namely, the company;

¹ For further particulars see Education for Management, J. A. Bowie (Oxford: The University Press, 1930), and the Report on Education for Management, published by The British Association for Commercial and Industrial Education in 1928.

- (g) To interpret and expound the managerial point of view;
- (h) To impart a better knowledge of human relationships and a sympathetic understanding of men;
- (i) To increase his powers of clear thinking and self-expression and teach him how to convey knowledge and instructions quickly and clearly;
- (j) To indicate his responsibility not only in controlling but in developing men;
- (k) To enlarge his knowledge of practical economics.

In 1938, as the result of a demand from the South-East London Technical Institute and other larger colleges, the I.I.A., in conjunction with them, set up as standard a syllabus for a two-years' course in Foremanship with sessional examinations, and awarded a certificate to those qualifying. An examination paper (usually comprising about ten questions of which six must be attempted) was set in each of the five sections and was assessed by the Institute of Industrial Administration. One advantage of this course to the supervisor who wished to go further was that he could proceed to take the more advanced I.I.A. courses and examinations, and those in foremanship already passed counted in his favour.

The demand for courses, and in consequence the number of technical institutions offering them, was small; but the second important development occurred in September 1941. On the instructions of Mr. Ernest Bevin, the Ministry of Labour and National Service caused definite courses of lectures and discussions on foremanship to be set up in many more evening schools and technical institutions throughout the country. Five thousand foremen were attending courses within six months of the inception of this new scheme, which followed closely the syllabus already established by the Institute of Industrial Administration, but was shorter and more intensive. Provision was made for lectures covering the following subjects:

General Principles of Foremanship and Supervision. Principles of Production and Planning. Elements of Labour Management.

Costing and Remuneration.

The courses are normally of 72 hours' duration and are usually given in 2 evening meetings of 2 hours each per week. For con-

venience, a shortened course has been introduced recently, consisting of 12 two-hour lecture-discussions. In March 1942, also, a special course was instituted for women supervisors (engineering), consisting of 15 lecture-discussions, each of 2 hours. No fees are charged. Those completing the course and so desiring may take the examination mentioned above.

Courses of training may be supplementary to, or may even coincide with, the Institute first stages and elementary courses in Management. It is proper, however, that they should be specifically designed for foremen wherever possible, and, being limited to those subjects which strictly concern foremen, should be simplified and adapted to their special needs. While it should be possible for such courses to form the first step to qualification in management, so that those fitted might proceed to broader and more detailed issues of management, it is necessary to bear constantly in mind that the primary purpose is for training in foremanship, and *not* in management, and to take into consideration the more limited abilities and more restricted education usually characterising those concerned chiefly with departmental supervision.

The training of foremen, as will be seen, is a comparatively recent departure in Great Britain, with special problems, and without valuable precedent. It is a subject not widely recognised or hitherto thoroughly treated; it affects adult persons of limited general and formal education, but with considerable personal power, responsibility, and experience—essentially practical men engaged in industry, and usually specialists in the narrow application of one process or trade, itself more or less skilled; and men differing in experience, responsibility, knowledge, skill, and ability, engaged in different trades and holding different positions. Present methods must be regarded as being entirely tentative. The restricted facilities available, the existence of too few textbooks, the unsystematised nature of the subject to be taught, the lack of experienced teachers, and the absence of settled and proved methods of instruction, cannot but produce limited results.

There are three main problems in training foremen, namely, the matter to be taught; the method of teaching; and the teacher. First, there must be some agreement, if only temporary, regarding the subjects to be taught, which must be decided entirely with a view to the foremen's requirements. The suitable syllabus above mentioned, drawn up by certain large technical institutions in association

with the Institute of Industrial Administration (as a national and centralised professional body chiefly interested in promoting education for management) may be suggested as deserving general acceptance. This syllabus, which is being adopted in numerous technical institutions as a standard, consists of the following subjects. The full session for subject (1) would consist of about thirty meetings, on one evening a week. The other subjects would be covered in about fifteen weekly meetings each.

First Year Subjects:

I. GENERAL PRINCIPLES OF FOREMANSHIP AND SUPERVISION

Outline of factory administration. Co-operation between departments. Types of foremanship and supervision in varying organisations. The tone of a workshop. Essentials of leadership. Qualities of a successful foreman, and their development. Duties and responsibilities. Relations with the management and with the employees. Executive control. Employee representation. Accident prevention. Plant efficiency. Prevention of waste. Industrial Psychology.

2. ELEMENTS OF LABOUR MANAGEMENT

Organisation of duties of a Labour Department. Recruitment, training and discharge of personnel. Working conditions. Job specification. Employment records and graphs. Health services and facilities. Keeping in touch with employees. Education. Factory and other legislation. Workmen's compensation. Welfare work. Canteens, clubs, recreation.

3. PRINCIPLES OF PRODUCTION AND PLANNING

The importance of production in factory organisation. Its initiation and authorisation. Relations of production department with other department. Function of Design. The Drawing Office. Production planning methods. Plant balance and layout. Plant and tool provision in all stages. Mechanical handling. Progress control methods. Stores organisation and methods.

Second Year Subjects:

4. PRINCIPLES OF REMUNERATION AND ESTIMATING
Economic theories of wages. Daywork and incentive
methods of payment. Timekeeping and wage office routine.

Qualifications of the rate-fixer. Organisation of rate-fixing department. Time and motion study. Their bearing on efficiency of work, and on job rates. Factors in construction of job rates. Function and qualifications of estimator. Job analysis. Time standards and allowances. Material requirements. Provisions for oncosts. Purpose and construction of estimates. Comparison with actual costs.

5. ELEMENTS OF COSTING

Nature and importance of costing. An aid to management. Its value to the foreman. How costs are constructed. Recording and allocation of labour and material costs, direct and indirect. Explanation of oncosts. How they affect cost of production. Their classification and allocation. Standard costs. Costing according to operations—job, multiple, process, etc. Cost recovery.

Setting up a standard syllabus does not imply uniformity of treatment, but it does infer the adoption of the lecture method if the subjects are to be covered adequately. The lecture-conference, the discussion group, and the case method have all been abandoned in favour of the intensive instruction common to the formal lecture with provision for subsequent discussion. Lecture notes have been made available by the I.I.A. to guide teachers in the planning of their courses. In view of the shortage of teachers, always common when a sudden demand materialises, special arrangements have been made by The Polytechnic, Regent Street, London, W.I, to provide a course for lecturers. Similar facilities were arranged by the Institution of British Launderers in providing training for management in the Laundry Industry.

While the actual treatment of subjects in a lecture course can be guided in content by a standard syllabus and helped by special instruction in teaching methods, the final results achieved must depend on the teacher, his practical experience of responsible executive work in industry, and his capacity for imparting useful information and adapting it to the intelligence of those being taught. In foremanship training a knowledge of methods and an understanding of principles is not sufficient; the foreman must, in addition, develop the right practical and progressive viewpoint, and what is more important still, he must acquire the ability to apply the result of his training to every-day problems. Courses of instruction must

not be regarded only as a means of passing an examination. Generally, those attending training courses already have a good deal of practical experience, so that what they most need is to learn to apply that experience to better advantage, or, in other words, to become more competent as executives.

The third problem, that of finding and appointing suitable teachers, is without doubt the most difficult. Teaching is a gift only rarely to be found in industry. Adults, especially those with considerable experience in responsible positions, need unusually wise and competent instruction. In these circumstances, teaching calls for a thorough understanding of human nature, an intimate knowledge of the subject to be taught, and substantial practical experience, as well as the ability to impart information by suggestion and persuasion. It is necessary that the teacher should assume authority and command respect. He is responsible for selecting material and transmitting it. He is expected to encourage interest, generate enthusiasm and stimulate self-development. He must deal with practical matters and concrete cases which are known to or which appeal to those learning. He must induce an interest in methodical and worthwhile work. Finally, he is dependent on good response and continuous attendance, which, where individuals are free to please themselves, is a sure indication of personal success or failure. Unfortunately, under the present system of evening instruction by technical institutions, the part-time teacher is badly paid, considering the reading, preparing and delivering lectures, and travelling he must do, so that foremanship training is dependent on a labour of love by the few so inspired, or must make the best of inexperienced teachers.

The aim of vocational education is to get industrial action, and it calls not only for knowledge of methods and practices, but still more for the creation of an attitude of mind which sharpens observation, encourages analysis, prescribes solutions, and puts ideas into practice effectively. Knowledge in industry is one thing, but ability to think out new solutions and apply them successfully is something quite different.¹

49. Understudy Assignments

One of the chief problems of foremanship development is the need to foresee and forecast future requirements. The present

¹ For further discussion of this subject see *The Adult Class*, by A. J. J. Ratcliff (London: T. Nelson, Ltd., 1938); and *The Consumer's View of Adult Education*, by W. E. Williams and A. E. Heath (London: Methuen & Co. Ltd., 1941).

problem of supervisory ineptitude, which may be partly overcome by intensive training through discussion conferences and lecture courses, must be prevented from recurring by preplanning for and preparing of replacements. It is not uncommon for existing foremen to be retained chiefly because trained substitutes are not available. When experienced foremen, however poor, can only be superseded by workmen without supervisory experience, they naturally regard themselves as indispensable, in the absence of competition, and in consequence become independent, unprogressive, unreceptive, and complacent.

The background of many existing foremen is also unsatisfactory. Instead of preparing and training for a position of responsibility, they are content to remain for many years as workmen, more or less skilled, until one day they are pitchforked into a type of work for which they may or may not be suited, and of which they have had no previous experience. A contributory cause of this lack of preparedness, apart from the absence of training, is the exceptionally long service of their predecessors; it is not uncommon for foremen to have held the same position for thirty years. Naturally, in such cases, those who are determined to secure positions of responsibility leave for more promising fields, while others, less insistent, lose interest in promotion because of its apparent remoteness.

Whether, in view of the more widespread recognition of supervisory competence, managements will be content to suffer untrained and unreceptive men in positions of responsibility, will soon be seen when staff reconstruction again becomes possible. The re-establishment of competition and expansion in the post-war period will enforce consideration of supervisory staff to ascertain whether they are able to face the constant strain of concurrent demands for more efficient production and still better labour relations. Everything points to the need for an adequate reserve of men trained in supervision. The sooner the trainee is selected, and the longer his training, the better for all concerned. If the cost of training is to be expended in the right direction, proper selection is an essential preliminary.

Although, in a few cases, the appointment of foremen is made directly from among applicants from other companies, more or less experienced in supervision, the majority of companies prefer to promote from within, often from the ranks, and not infrequently from those already working as operatives in the department where

the vacancy occurs. There is a general desire to know something of the men at first hand before placing them in positions of responsibility. While it is an undoubted fact that the majority of companies do promote uninstructed men from the operative rank, a change is taking place definitely, if gradually, in favour of the recruitment of specially selected trainces.

Generally, the first concerns to move in this direction are those engaged on highly technical processes, where a good deal of theoretical knowledge is more or less essential to competent supervision. Instruction in foremanship in such cases is given either in conjunction with the established technical courses or as a supplement to them. Often, foremanship training is not considered until after the intended trainees have undergone a specified course of instruction and have attained a prescribed standard such as Matriculation, or the Higher National Certificate in Engineering (Mechanical or Electrical), or Chemistry. More and more companies—apart from those concerned with intricate technical processes—in recognising the value of education in positions of supervisory responsibility, are moving away from the ideas of rewarding long service and from promoting skilled craftsmen in favour of the method of selecting younger men of more suitable types and with better education, and training these by a specially planned combination of practical experience and theoretical instruction, to meet specific requirements. While existing employees are not barred from promotion, preferably they must have reached certain minimum standards of education, usually to be secured through evening classes.

One company attributes the declining advantages of upgrading from the ranks to the fact that an increasing percentage of the more intelligent youths who formerly would have entered a factory to make their living, are now going on to secondary schools, technical colleges, and in some cases to universities, with the result that the cream has been skimmed off the milk before it reaches the factories at all. In consequence, the method adopted by the company in question was to approach local secondary schools, minor public schools, and technical colleges, with a view to engaging each year a limited number of trainees. After selection, the trainees follow a more or less prescribed apprenticeship in various departments to gain practical experience for one, two, or three years. If their progress is satisfactory, they are given positions as understudies for a period, to test their supervisory qualities and capacity for responsi-

bility, and to await promotion to posts from which further progress will depend on performance and opportunity.

The practice of giving an understudy assignment to comparatively young men and prospective supervisors is of considerable value. It enables the employer to judge by experience the suitability of the trainees, and to prescribe further courses of training if necessary, and it permits the individuals concerned to decide whether they will like work of this kind, and be able to do it. While some risks attend the practice, the cost is not great compared with the experience gained, as the trainee is expected to do useful work during his novitiate. Although many companies prefer to train their own future supervisors and executive staff in this way, it is common for large concerns, especially in the various branches of engineering, to have a set course of apprenticeship operating continuously to meet their many requirements. It is not uncommon, too, for companies to exchange trainees to provide better training for their mutual benefit. Sometimes the training in the works is supplemented by courses of instruction, either conducted on the premises, or by arrangement with a local technical institution. Large companies in widespread industries are naturally better placed in many respects for this purpose than smaller concerns engaged in a more restricted trade.

Smaller companies, sometimes situated in remote localities, are often faced with problems which do not occur in larger companies or those within easy reach of technical institutions. In smaller units there is less opportunity to find instructors, the candidates to be trained may be few in number, and intimate acquaintance with particular technical processes a more important factor. In spite of this, training, even though on a reduced scale, is not less necessary if continuation of management is to be ensured and provision made for expansion.

The laundry industry, for example, with its 170,000 work-people, includes many comparatively small units each employing less than fifty operatives and often situated in small centres of population. These units are usually highly competitive, being faced with more-or-less standard prices and having a high proportion of cost absorbed by labour alone. Supervision is largely the key to success or failure in achieving a high standard of quality and service which, together with an economical utilisation of labour, are the competitive aspects of the trade. Because of the comparatively

small size of many of the units in the industry, management and supervision must also be associated with a sound theoretical knowledge of the technical processes involved and practical experience in their application. While the understudy method is suitable for acquiring practical experience in various departments, it does not lend itself to the acquisition of the underlying principles determined by modern research.

In order to meet this training problem on a co-operative basis, the Institution of British Launderers Ltd. (previously The National Federation of Launderers Ltd.) started, in the autumn of 1928, evening classes in London covering Government Regulations, Engineering, Advertising, and Staff Training. These subjects were all related specifically to the needs of the Industry, and the course extended over two years. It met with immediate success, and similar courses were introduced by many technical colleges in the larger towns.

Competence and consistency in teaching methods were assured at the provincial centres by introducing an intensive annual Tutorial Course for the teachers, who were usually the lecturers in Chemistry at the respective colleges. At this annual gathering, representatives of the lecturers were elected to the Examining Board appointed by the Institution of British Launderers, which awarded National Centralised Laundry Certificates. These were recognised as being of sound practical value both to employees and employers. To meet the varying needs intensive instruction is available for a 3-years' course (2 years in laundries), as well as for 9-months', 6-months', and 3-months' courses. All courses cover: (a) Technical Processes conducted by the British Launderers' Research Association at their laboratories, including Laundry Chemistry, Textiles, Analytical Chemistry, Engineering, and Laundry Technology; and (b) Management, consisting of Costing, Industrial Psychology and Production Methods, and Laundry Engineering and Planning, at the Institute's head office at Lancaster Gate, London, W.2. For older and more experienced executives, refresher courses are available in the form of an Annual Congress lasting a week, Annual District Conferences lasting two days, and the Young Launderers' Congress (now called Junior Week-end School).

The arrangements made in the Laundry Industry have been described in some detail because they indicate the widespread recognition in the trade of the need for training, the acceptance of

full responsibility by employers, the advantages of small firms combining together either in the same district or in the same industry for training purposes, the appreciation of the need for special treatment of foremanship in conjunction with trade problems, the facilities provided to overcome local difficulties, and the wide variety of alternative methods made available to meet differing circumstances.

D. OTHER METHODS

50. Visits to Plants

It has been recognised for some time that visits to other plants have definite advantages, primarily as a means of broadening outlook by stimulating interest and creating discussion on industrial matters generally.

Taking a man away from the burdensome details of his own job and letting him view the problems and practices of other departments, acts as a refresher. If only for this reason, it is thought worth while to encourage the general discussion of industrial problems so that the foreman can relate his own job to others and gain, apart from breadth of viewpoint, some intimate knowledge of other methods of operation which might be employed in his department.

Visits to plants come under two headings, namely, interdepartmental visits conducted within the same industrial unit; and inter-plant visits arranged with other companies. It is clear that inter-departmental visits are likely to be the more beneficial, in that they are closely related in trade and system to the foreman's own department. Although inter-plant visits may be the more effective in broadening outlook, the possibility of conveying directly valuable and practical information is much greater where the visits are interdepartmental. The method usually adopted is for each foreman in turn to conduct a visit of inspection round his department, and at each significant point to give a description of the processes and to indicate the systems and control at work. Such visits, occurring possibly on Saturday afternoons at monthly intervals, enable the foreman to outline his job, answer any questions raised, and deal with any suggestions or criticism advanced. One advantage of them is that they enable foremen to gain a better appreciation of the company's policies, practices, processes, and products. They also help him to understand the organisation and system which link one department with another, give him an opportunity to raise problems

of inter-departmental co-ordination, stimulate collaboration between departmental supervisors, and improve their status and self-confidence. If any of these aims is even partly attained, and close contact is achieved and the feeling of isolation among foremen, so common in larger companies, overcome, inter-departmental visits are to be recommended as a beneficial means of foremanship development.

Inter-plant visits can be used either in conjunction with inter-departmental visits or separately. Arrangements for foremen to visit other factories are chiefly of value in broadening outlook, the resulting discussions being confined more to such general problems as incentives, labour control, etc. Visits of this kind are naturally more suited to smaller companies having only a few departments, the details of which are fairly well known to the foreman in his day-to-day contacts. It is as well to mention, however, that while companies in the same competitive industry might mutually benefit from inter-plant visits by each other's foremen, the prevailing tendency to secrecy and conservatism is usually against this more open-minded practice.

The pioneer work done and the notable success achieved by the Foremen's Tours organised by the Industrial Welfare Society should be noted in connection with inter-plant visits. Commencing in July 1935 the Industrial Welfare Society organised three foremen's tours a year, when some 30 foremen from 15 companies were gathered together at a convenient centre close to the plants to be visited, which were selected by the Society. A hotel of moderate class was selected as headquarters so as to be in keeping with the tastes of the foremen, many of whom had not previously stayed at an hotel. The tour began with a dinner and discussion at the hotel on the Monday evening. A morning and an afternoon visit followed on both the Tuesday and the Wednesday, and on Wednesday evening the tour was concluded. Some idea of the variety of companies visited can be gathered from the last tour before the war in February, 1939, with Liverpool as the industrial centre, when the works of The Automatic Telephone and Electric Co. Ltd., Paton, Calvert & Co. Ltd., Pilkington Bros. Ltd., Vernons Pools Ltd., Arthur H. Lee & Sons Ltd., and Lever Brothers Ltd. were inspected. On this occasion the guests leading the opening discussion were Sir F. J. Marquis of Lewis's Ltd. (now Lord Woolton, Minister of Food), and Mr. O. B. Smyth of Lever Brothers Ltd. The foremen

came from W. & T. Avery Ltd., The Dunlop Rubber Co. Ltd., the Mond Nickel Company, Reckitt & Colman Ltd., the Renold Coventry Chain Company, Vauxhall Motors Ltd., as well as several others. The entire cost of the tour, amounting to about £2 per head, was defrayed by the companies which sent the foremen. Mr. R. R. Hyde, director of the Industrial Welfare Society, together with a director of one of the firms visited, led the discussions. These tours proved an outstanding success and would have been continued but for the war.

The companies sending foremen on the tours were well satisfied for, at little cost and little inconvenience, they were enabled to reward, in a small but tangible way, foremen they wished to encourage, and to provide a refreshing break for men who had given long service in their jobs but had had little experience outside them; it permitted broadening of outlook and the chance to improve on experience; and it tended to raise the status of the departmental foremen. As a war-time measure, the Industrial Welfare Society has convened occasional Saturday afternoon meetings for foremen in certain districts. These conferences have been attended by over 100 representatives from local companies, and found to be generally beneficial.

51. Distribution of Printed Material

Although the Ministry of Labour and National Service have offered to arrange, in conjunction with local educational authorities, for courses of lectures in Foremanship to be provided free of charge if sufficient support is indicated, there still remain to be considered large numbers of established foremen and prospective supervisors engaged in companies situated in the country or at some considerable distance from a technical institution. It would appear that the internal course might provide a solution for larger companies, but this might be difficult for smaller concerns, having few foremen. Then again, considering how few competent instructors are available at present for foremanship training, it is not easy to secure the services of lecturers, and such companies may not have on their staff executives able or willing to devote their spare time to this work. In such situations a suitable correspondence course might prove of value.

As an alternative, both for companies situated at some distance from larger towns or educational centres, and for others desiring

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supplementary means of training, use can be made of printed matter in the form of books, pamphlets, and specially prepared notes. Foremen generally are neither conversant with textbooks, nor able to benefit much from them, unless under guidance. A book or pamphlet, to be of the greatest use to foremen, must be specially written for them. It should be simple and easy to read, brief and to the point, and the illustrations and diagrams should have a special attraction for the intended reader. Any publication selected for distribution among foremen must meet these requirements. American books offer a wide variety. Some companies have adopted the practice of giving their senior staff and foremen a carefully selected book, either annually or occasionally, at Christmas, or at some other suitable time. Others have gone a step further by distributing a selected textbook, pamphlet or report and arranging meetings in order to discuss it section by section.

A good general introductory book is Casson's Handbook for Foremen, and the same author's pamphlet, How Foremen Can Reduce Costs, both published by The Efficiency Magazine and priced at 5s. and 1s. respectively. There are three textbooks—Training in Foremanship and Management, by J. J. Gillespie, and Modern Foremanship, by T. H. Burnham, both published in London by Sir Isaac Pitman & Sons Ltd., at 7s. 6d.; and Introduction to Foremanship, by various I.I.A. members (London: Macdonald & Evans, 8s. 6d.), which was prepared specifically to cover the syllabus of the Ministry of Labour and National Service scheme. In addition, numerous pamphlets have been published by H.M. Stationery Office, particularly reports of investigations made by the Industrial Health Research Board. Professional bodies have issued books and pamphlets of considerable interest and value, particulars of which can be obtained from the National Institute of Industrial Psychology, the Industrial Welfare Society, and the Institute of Labour Management.

One company, after reviewing completely the material available, adopted the Foremanship Management Conference Course issued by the National Foremen's Institute of the United States. This is accompanied by a competently prepared Conference Leader's guide, and is not only an exceptional piece of work but is eminently suitable for British Industry. Copies are available for perusal in the Management Library.

Notes relating directly to the work of the foremen in an individual business, can often be distributed with profit; for instance,

brief simple notes on new Government Acts or Orders, new restrictions and regulations, can stimulate interest, educate and inform, and ensure understanding and uniform application. Notes on new processes or procedures can encourage full appreciation and interest and serve as a useful reference. Care must be taken, obviously, to avoid a continuous stream of material, which has the effect in practice of reducing attention.

Another feature adopted by some companies is the creation of a works library for staff use for reference or loan, and including technical and executive subjects. Both in conjunction with this arrangement and independently, there has grown up the more common practice of circulating trade and other journals to those desiring to see them. Although trade journals are purchased by most companies, not infrequently they are seen only by a few persons, but the growing tendency to-day is to allow such foremen as are interested to take advantage of this service. It is not suggested that foremen should become bookworms or spend a large part of their time reading trade papers. The important thing is to make the service available, as part of the policy of development, and to let the staff understand that they are encouraged to look for, and try out if thought desirable, the new devices, processes, or suggestions often to be garnered from the technical press. As part of the policy for training staff and encouraging self-improvement, this tends to make the foreman more observant and more interested in his job.

52. Foremen's Association

One of the features in industry which is becoming increasingly more pronounced is the desire for, and the need of, great sociability. Instead of, as in the past, regarding the affairs of a company entirely as a matter of business relationships to the exclusion of any social contacts, it is now generally appreciated that the enlistment and retention of a contented staff depend greatly on the social conditions in the factory. Here again, the first step concerns the higher and lower administrative staff; the collaboration necessary for success in a co-operative effort depends on a mutual understanding which can often be promoted outside working hours.

Some companies have set up, with commendable results, a Staff and Foremens' Association as a self-governing body restricted in membership to those above a minimum executive status.¹ The

Association is given every encouragement by the company, which provides facilities for weekly, formightly, or monthly meetings, often in the Staff Canteen after working hours. Directors and higher management personnel give occasional talks on various aspects of the company's domestic problems.

Another common feature is an annual Foremen's Dinner given by the company, when the opportunity is taken to review past results and indicate future policy. Arrangements are also made for inter-departmental and inter-factory visits. An annual outing may also be included in the programme. Such an Association shows that the company has regard for its foremen and executive staff and is anxious to demonstrate the fact. Moreover, it promotes cohesion and co-ordination, and by requiring a definite qualification for membership, it improves the relative status of those eligible to belong to it. The cost is small.

Some companies, at their own expense, send selected foremen as delegates to district or national conferences. Such an arrangement was adopted in 1919 by Mr. Seebohm Rowntree, when he inaugurated the Balliol College lectures at Oxford. These meetings, which were intended for works directors, managers and foremen, were usually held twice a year, in the Spring and Autumn, and lasted from Friday till Sunday. Those attending the conference were accommodated in Balliol College, and the meetings were addressed on current problems by specialists in various aspects of industry. Since 1936 these half-yearly meetings have been continued under the direction of the Confederation of Management Associations. By sending foremen and others to these meetings, meritorious performances can be recognised and rewarded, and in addition, those attending benefit from a broadened outlook and from social contacts, quite apart from any instruction, information, or suggestions they may gather. It is found in practice that the delegates derive considerable satisfaction from being selected to represent their company; they feel privileged to talk about "our company", and return refreshed in mind and willing and eager to discuss the proceedings of the conference.

The increasingly widespread recognition of competent foremanship, the need for training, and the advantages of a commonly accepted qualification of professional status, suggest that there are advantages to be gained from a National Association or Institute of Foremen. Such a body set up with the aim of promoting pro-

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fessional status and encouraging better standards of foremanship, would have a wide appeal. With a central co-ordinating Council in London, self-governing branches at the various industrial centres could be arranged, and monthly meetings held, as is done in the case of other institutes, to encourage the exchange of information, and to stimulate interest in foremanship problems.

With the steady growth of Management Associations in recent years, there is ample evidence of the general desire in Great Britain among those in similar industrial positions to collaborate for their mutual benefit in order to consider common problems and thereby to raise their professional status. A National Institute of Foremen is not unlikely to arise from the considerable growth of courses of instruction, under the stimulation of the Ministry of Labour and National Service, and in consequence of the substantial number of foremen working for the Institute of Industrial Administration examinations, with the object of obtaining a nationally recognised certificate in foremanship and supervision.

Such an Institute should follow the lines already taken by senior professional bodies. Full membership might be restricted to those over 30 years of age having at least five years' supervisory experience, who are qualified by examination or are exempted. Associate membership might be confined to those over 25 years of age, qualified by examination, and having at least one year's experience in a responsible position. Graduate members would be those who, having passed the set examination standards, have either not attained the age requirement, or still seek supervisory experience to qualify for the higher grade. Further, in view of the large number of foremen in the country, a suitable magazine devoted to foremanship topics might be established to disseminate useful information, provide for an exchange of opinions, and serve as a clearing-house for ideas. Experience in America shows that an Institute of Foremen should confine its activities to professional matters, and, whatever the temptation, should not include the facilities of a mutual benefit association, although there is no reason why an appointments bureau should not be maintained, as is done in other professional institutions.

These various ways of developing in the foreman a wider interest in his job, both within the company and by use of outside facilities, must be of substantial benefit to individual concerns and to industry generally. Although these measures should evolve natur-

ally, if slowly, from the demands of foremen themselves, they can be greatly stimulated by encouragement from higher officials. Even now, as stated above, some companies are taking the initiative by sending their foremen to national and district conferences; many more are sending their foremen to courses of instruction; and a few are offering special rewards for those who pass the Institute of Industrial Administration examinations in Foremanship and Supervision. Training has changed from being the sole responsibility of the trainee to being a chief concern of the employing company.

E. RECOMMENDATIONS

53. Planning Foremanship Development

Foremanship Development is the ultimate responsibility and should be the immediate concern of management. Training (by special means) is necessary to meet the present urgent problems of production, as well as to prepare for post-war reconstruction; the cost of training personnel is not high and yields good dividends. Care must be taken of course to avoid blind imitation of a scheme that has been successful elsewhere. The best method can be determined only in relation to the purpose sought, the problems prevailing, and the local circumstances. As a preliminary to launching a development programme, the following issues need consideration:

- (a) Whether the existing foremen constitute the company's final and settled selection, or, if not, whether substantial or only minor changes are contemplated. It is clearly wasteful to spend time and money on training men who are proved unsuitable for the positions they hold, but who cannot immediately be replaced, or those who are near the age of retirement. Also, the possible length of service either required of existing foremen, or likely to be given by them, will determine to what extent development would be justified.
- (b) Adequate consideration should be given to the exact aims which a scheme for foremanship development seeks to achieve. These may range from a general desire to broaden outlook and to improve attitude, down to specific instruction in waste reduction and labour control. A comprehensive arrangement would include aims which are both general and specific.

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- (c) Following the decision on policy it is necessary to draw up a programme to relate the character of the aims to the time factor. Naturally, fundamental changes in general outlook are likely to take longer than instruction on limited specific problems of immediate urgency and require different treatment. Stress must be placed too on the need for comprehensive preparation, so that foremanship development has the appearance of a definite and thoroughly organised policy with a decided plan.
- (d) Foremanship development must be planned in relation to the existing managerial and executive staff. A programme might well commence with conferences of the higher management or of departmental superintendents, each of whom is responsible for a number of foremen; this course has been followed by certain companies. It is obviously an error to preach collaboration and improvement to foremen when there is ample evidence in practice of friction among the higher executives.
- (e) As a next step, it is necessary to decide the constitution of the group. Generally, the leader must be chosen for or by the group in the case of the conference method, and is usually the works manager. Apart from the representative of the higher management, it is to be decided whether any specialist executives such as the labour manager, the costing and statistical manager or the time study and methods manager, shall be permanent members or whether they are to be co-opted or consulted as and when required. The range of ranks attending conferences should be limited, junior executives such as charge-hands or understudies and trainee supervisors being excluded. The number and constitution of groups must also be determined so as to avoid working groups much greater in size than fifteen. Groups can be arranged on a departmental and geographical basis, or on a functional plan where set subjects such as Labour, Production, Materials, Cost Control, etc., can be discussed separately.
- (f) The authority to be given to a conference group is important. This may be executive and self-determining within prescribed limits; it may be purely advisory and under obligation to submit proposals and recommendations in the

- form of a report to a management committee, a Junior Board, or even to the Senior Board of Directors; or it may be discussional only.
- (g) A further issue concerns details as to when and where meetings are to take place. First, it must be decided whether the meetings are to be temporary or permanent, regular or spasmodic, and whether daily, weekly, or monthly. The period of the conference, while having some bearing on frequency, should be limited to one-and-a-half hours. Next follows the question whether the meetings are to take place inside or outside working hours, and in the latter case, whether they are to be on or off the company's premises.
- (h) If formal courses of instruction are favoured, the choice lies between an internal class conducted by existing executives or outside teachers, and resort to facilities offered by, or requested from, a local technical institution.
- (i) Some consideration should be given to the expense of training, and whether this is to be borne entirely or partly by the company. It is sometimes desirable as an encouragement to offer certain privileges to those attending set courses of instruction and to consider awards or the granting of special facilities to those passing the examination set by the I.I.A. in Foremanship and Supervision.
- (i) After drawing up a plan setting out programme and procedure, the ground must be prepared for an openminded or even enthusiastic reception of the proposed scheme. decision of one company to consult a specialist who decided to interview and discuss separately with each foreman his particular problems and difficulties, indicates the advantage of outside impartial analysis and advice. Other companies, conducting their own arrangements, have decided for senior management to spend some time in encouraging a changed general attitude, where excessive friction or distrust may have existed hitherto due to past management or misunderstandings or some other cause. The more general method, however, is for a first conference to be called when the managing director makes a considered statement of the proposed plan, outlines the problems to be dealt with, and justifies the scheme as arising out of present

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difficulties and future requirements. Success depends largely on the ability to put over and "sell" the proposal to the foremen concerned.

54. Conclusions

The purpose of this survey is to set down impartially and independently the case for foremanship development, and the means for accomplishing it, with a view to placing before those directors, managers, and executives directly responsible for the supervision of foremen, the methods available and their relative advantages, so that the choice made and the decisions taken can be based on practical experience made available by well-known and representative companies.

It is fully recognised that book knowledge alone cannot possibly make a good foreman, any more than the mere passing of examinations implies the ability to carry out in practice those policies and procedures advocated on paper. Yet at the same time, lectures, reading, and examinations serve a useful, if limited, purpose. The alternative method of training by periods as understudy, apprentice, or charge-hand in one or more departments has only a restricted use, especially in war-time; the process takes far too long and the results obtained are uncertain. In any case, the acquisition of ability by the absorption of practical experience alone is insufficient. It is now necessary to train intensively by lectures, discussion, conferences, and reading, and under qualified guidance, suitable and prospective supervisors, as well as more experienced foremen.

It has never been demonstrated that training either through conferences or by courses will produce for a company a first-rate foreman, or, for a trainee, certain promotion. Success in supervision depends on ability, on training, on capacity to profit both from experience and from instruction, on circumstances, and on opportunity.

As with many other executive devices, such as planning and budgeting, the acceptance or rejection of training is determined by competence in the responsible authority. Although some companies have regarded war conditions as a reason for not considering or adopting new devices, this is merely an excuse which, if it were not the war, would be something else. In fact, in a lethargic and complacent concern there are always ample reasons for leaving things as they are. If ever intensive training was necessary, it is

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under the compelling need of war, and it is even more imperative to prepare for the reconstruction which must follow.

The review of present practice in Foremanship Development in Great Britain reveals a certain hardening of opinion as to the alternatives available and the measures to be taken. The more noteworthy tendencies, accentuated in recent years and accelerated by war conditions, may be indicated briefly:

- (a) Previous efforts to overcome supervisory deficiencies by the appointment of functional specialists (i.e. experts in Planning, Ratefixing, Labour Control, etc.) have been succeeded by arrangements for strengthening the status and authority of the departmental foreman.
- (b) Measures to improve the ability and adaptability of the older and established foreman by contact and conference have been introduced, as distinct from the policy of laisser-faire.
- (c) The tendency to select younger men with intelligence and education, more suitable for supervision but possibly less experienced in productive processes, has established itself, replacing the tendency to regard foremanship as a reward for long service or skilled craftsmanship.
- (d) Companies are admitting the efficacy of training selected staff intensively before appointment in the technique of foremanship as supplementary to ability and experience and are accepting full responsibility for it, this being in contradistinction to the method of continuous instruction by trial and error after promotion.
- (e) Improvement in industrial relations is being tackled from the top by creating better understanding between management and foremen in conjunction with the method of improving physical working conditions in the workshop.

Many fundamental issues are involved in this changed outlook. The more modern form of control is being initiated from the top rather than being forced by those of operative rank. Discussions are coming to be regarded as the established machinery for coordination and the means of ensuring common understanding and uniformity in application of company policies. The prejudice against conferences as time-wasting devices is being overcome by a better appreciation of the means for managing group discussions to achieve decisive results rapidly. The objection to education,

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training, school, and classes for executives in industry is fast disappearing in face of the enormous number of courses adopted as standard procedure in the services and in civil defence. Training is accepted as a continuous process rather than as a phase left behind at the elementary school stage, and further, instead of instruction being left to individual inclination, it is now regarded as the concern and responsibility of the employer. There is widespread recognition of the demand for better education and keener intelligence as the basis of competent foremanship. The man is recognised as the key to successful management, with the result that more time is given to selection, training, and retention than hitherto. Teamwork in the executive is regarded as an essential preliminary to better co-operation in the workshop.

Foremanship development aims at increasing production and improving industrial relations by commencing with the management rather than with the operative, and by starting at the top instead of at the bottom. It is felt that the present times demand a supervisory leadership which demonstrates to employees that the management can work as a team, and as such, show the way to better departmental understanding. Managerial collaboration must precede workshop co-operation. In conclusion, it may be claimed with reason that foremanship development, successfully applied, creates a spirit of teamwork which is highly desirable in British Industry, and vitally necessary at the present time.

SECTION VII

INCENTIVES FOR EXECUTIVES

A. THE CASE FOR INCENTIVES

55. Executive Encouragement

Any man interested in his job will work well; but if he is to give of his very best he will usually need appreciation also. The simplest, and perhaps best form of appreciation is the offer of a financial incentive. It is therefore important to discover which incentives have the highest appeal and produce the best results. Times have changed. In the past, with ample alternative staff available, the prospect of long unemployment induced men to work hard enough to avoid dismissal. To-day, with an exceptional scarcity of skilled staff, fear of dismissal is almost non-existent. Apart from the economic changes in the labour market, which now forces the employer to sell employment instead of buying labour, it has long been recognised that the negative approach of fear, with few exceptions, compares ill, so far as obtaining results is concerned, with the positive incentive of reward for individual effort. Above all, the social temper of the times favours encouragement as against criticism.

Business men too have changed their views. Instead of concentrating exclusively on machines and materials, they are giving more attention to men and methods, and now seek to invest in competent personnel as well as in marketable products and suitable plant. Consequently, whatever may be the relative market conditions, there is no doubt that a wider recognition of the importance of first-rate managers and competent foremen is going to increase the competition for such staff. Accordingly, the use of incentives—valuable in attracting new staff and retaining old—the type of incentive to employ, and the manner of presenting it, call for intimate study.

One purpose of providing an incentive for executives is to develop the sense of proprietorship amongst managers and foremen so that they will come to feel personally concerned with the prosperity of the company. It is a major problem of industry to get employees to regard their job as though they were working

for themselves in their own business, but before they can be persuaded to place outside interests second, and turn their main attention to their jobs, they must have before them the prospect of suitable return. If promotional prospects are remote, and this is commonly the case with those of supervisory rank in Great Britain, then an alternative incentive, with a more immediate reward, must be substituted.

The provision of incentives in industry is not new. On the contrary, a large proportion of manual operatives receive payment by results, and in some cases higher management is rewarded by a bonus based on achievement. It is also fairly common practice for sales representatives to receive a commission on results. But as yet similar methods have been applied only in very few cases to those executives in the intermediate ranks of departmental managers and foremen, and it may well be asked why, if payment by results is so desirable for manual operatives, sales managers, and higher management, it has not been applied more liberally to executives in general. The answer may be either that the significance of executive work has not been fully appreciated, or that the application of incentives to executives has not been thoroughly investigated.

The value of executive work lies in the quality of decisions made in the day-to-day conduct of affairs. As distinct from the repetition operative, the foreman and departmental manager must use their own discretion on many points. In practice there is a considerable margin between the minimum essential to ensure the engagement and retention of an executive, and those maximum results which can only come from his wholehearted concentration on his job. It is by narrowing this margin between present and possible achievements that the executive incentive seeks to justify The individual character of executive work calls for the ability to lead and direct, and implies an immense personal influence over staff. While such ability and influence can of themselves produce commendable results, the effect of some form of appreciation, such as financial incentive, can act as a powerful energiser in effecting results better still. The offer of financial reward has been wholly successful in the case of manual operatives, and there is no reason why, in the higher scale of supervision and management, similar methods of reward should not be proportionately successful.

Executive efficiency is intimately linked up with remuneration,

and all earnings have meaning chiefly by comparison with those of similar status in the same or some other company. The measure of satisfaction or discontent with salary has relation also to the work done, the responsibilities taken, and the savings or profits made, all in comparison with others of similar rank. If remuneration is considered inadequate, it is natural to expect a disgruntled employee; whereas if it is considered reasonable, then uniform effort and concentration may be looked for. Low remuneration is regarded as an unwise investment whereas liberal payment for unusual effort and ability justifies itself amply, and is, in fact, particularly in the case of executives, an economy in high wages.

It is pertinent here to draw attention to those changes due to war conditions which have permitted manual operatives to receive wages as high as, and sometimes considerably higher than, their foreman. Dissatisfaction on the part of the foremen is natural, particularly since these same war conditions are continually increasing their responsibilities. Although present conditions amply ustify the immediate use of supervisory incentives, payment by results for executives is of fundamental importance, and should be subject to permanent application, and its introduction should accordingly be studied with that end in view.

The success of a business often depends on the competence of those in positions of responsibility, and it is interesting to note that the opinion of those who make frequent visits to numbers of plants, and who are competent to make comparisons, is that results achieved depend largely on the men composing the management. Good management works towards consistently high quality, both in personnel and production; towards orderly and uninterrupted progress; towards proper training and satisfactory working conditions; and towards co-ordination and teamwork. Poor management is often accompanied by irregular and unreliable output; rush and bustle; snap decisions; recurrent emergencies due to lack of planning; untidy, noisy, and chaotic working conditions, with complete indecision as to the future.

It is important, therefore, that a company should attract competent men, or men capable of becoming competent, and the immediate and future prospect of financial reward is one of the chief factors in attracting new executives. In the attempt to find better types for departmental supervision, the scale of salary offered and the possibilities of reward for individual effort can play an

important part. Generally, workshop supervision entails hardship in long and irregular hours of work, with considerable physical endurance, so that if better types of persons are to be enlisted, they must be offered possibilities of promotion, or more likely, suitable remuneration with the prospects of adequate additional return for individual initiative.

Apart from attracting and appointing new executives, there arises also the more important question of how to retain both them and existing executives. Staff turnover is a matter of serious concern. While no employee is indispensable, his loss may lower efficiency a good deal. Thus the resignation of a competent executive means the loss of his experience, his trade knowledge, his personal contacts, as well as any training he may have received. Then—and in many cases this may be serious—one company's loss may be a competitor's gain. Staff turnover also unsettles existing executives and trainees, and leads either to further losses or to a diminution in effort, temporarily or permanently. Undue loss of staff is also likely to affect those available in the employment market as replacements; and where there is close contact between staff and customer or staff and suppliers, the rumour of instability spreads rapidly and does no good.

Let it be clearly understood that the financial incentive is not meant to retain those who are unsatisfactory or those with a permanent grouse. Neither will the financial incentive make a good executive out of an indifferent supervisor. An incentive is not a substitute for ability and energy. It can only provide the motive to sharpen a man's wits and induce him to strive somewhat harder for the best possible results. A financial incentive, properly devised, encourages the executive to regard his department as a business—his own—within a business, and he does in fact assume the outlook of a delegated proprietor. A monetary interest in results encourages the executive to take a broad view of his responsibilities. What is equally important, it helps to limit in the supervisor the undesirable effect of those many trifling irritations in business which often lead to disinterest, discontent, and disappointment.

The proper application of a well-devised incentive should encourage the improvement of management and supervision by stimulating self-development. The prospect of a return for effort provides the spur to endure training. There is at the present day too much complacency and self-satisfaction in the ranks of

supervision, in the main due, perhaps, to the impossibility of furthering personal ambition after appointment since promotional possibilities are infrequent, and the spur of financial incentive and its possibilities has been too consistently overlooked and neglected.

Incentives can, as will be seen, serve a wide variety of purposes. In general, however, they seek to align the interests of the individual with the requirements of the company, so that both tend to share and enjoy a common prosperity. The value of teamwork is important in bringing about the best possible results and rewards, and it is useful in helping to overcome friction arising from petty grievances and personal differences. If the company's welfare and the private interests of the individual can be welded into a common purpose by suitable financial incentives, then such incentives are entirely justified. If the sense of proprietorship can be extended and increased and the manner and method of executive collaboration can be advanced, then financial incentives can make an important contribution to industrial harmony.

The problem of incentives, now that fear of dismissal and its consequences is so greatly reduced, is how to provide for executives that incitement to continuous and consistent striving. When it is fully realised how considerable are the losses to business in energy, ideas, and influence, simply through the failure to encourage and reward meritorious effort, directors view more favourably the payment of supervisors according to results. The need is for an incentive which awards automatically and impartially the results obtained by individual effort, and which avoids periodic and permanent increases in salary. Properly administered, salary should serve as an investment to the employer and an incentive to the employee. There immediately arise, however, questions as to the general form it is most desirable for the incentives to take; whether financial or non-financial; whether by regular or irregular salary increases or by periodic lump sum awards; or whether any supplementary remuneration is to be an arbitrary gift or a calculated bonus.

56. Financial and Non-Financial Incentives

The purpose of the non-financial incentive is so to adjust working conditions as to prepare the way for maximum individual effort. It endeavours to remove those obstacles which tend to prevent men from devoting their full time and energy to their daily work, and it attempts so to influence the employee's attitude

that he finds his job congenial and interesting, his superior considerate and impartial, and his working conditions comfortable. The aim of non-financial incentives is to establish that degree of contentment which permits the employee to exert himself without let or hindrance.

The financial incentive, on the contrary, aims, by the offer of monetary reward, to induce energetic striving. It provides that purpose which stimulates men to be more energetic, to apply themselves more readily to planning, to consider conscientiously the interests of their employers, and to make a drive for specific results.

Financial and non-financial incentives are interdependent. Any attempt, on the one hand, to instal non-financial incentives without complying first with the need for maximum monetary reward, would be futile. To establish financial incentives without first removing causes of friction and unrest, is to render these only partially effective. It is therefore not a choice between these two types of incentives, but the proper employment of both at the same time which is required. The non-financial incentive prepares the way by removing obstacles and facilitating development, whereas the financial reward provides the drive and direction for improvement.

Naturally, if men are to be offered a monetary inducement to obtain some specific results, it would be advisable to remove those difficulties which beset the road ahead. The elimination of personal grievances, unnecessary routines, inconsistent instructions, conflicting authorities, and undue waste of time, materials, and equipment, are necessary preliminaries before the installation of a financial incentive. As with the introduction of piecework for manual operatives, it is essential first to remove all obvious and unnecessary waste of time, and to set up a standard process procedure so that the results obtained are controlled and represent the application of energy. Unless this necessary precaution is taken, changes which should have been foreseen and made before the introduction of an incentive are effected afterwards, often with an unexpectedly high reward. If the basis of the bonus remains unaltered the employer is dissatisfied, and if it is modified the employee is disgruntled. Employers contemplating the adoption of financial incentives for executives are well advised to ensure that every possible improvement to facilitate executive work has either already been made or taken into account before the details of the proposed plans are decided.

57. Cash Increase or Bonus

Salary to executives is not decided by fixing an absolute amount, but is arrived at by reference to a scale which distinguishes grades. The salary scale generally determines the average amount to be paid grade by grade after taking into consideration relative responsibility; training, and experience. The scale has reference to salaries paid in other companies for similar classes of work and each grade is related to others within the same company. In this way, unlimited aspirations of the employee are reconciled with the restricted resources of the employer. However, the employee's minimum may well become the employer's maximum, as is so often the case with wage rates negotiated with trade unions.

Although there is a good deal to be said for the standardisation of wage rates, it is fundamentally important to recognise individual differences, especially in the case of executives, and to reward these accordingly, even within the same group. Business men will naturally secure the services of their executives on the best possible terms, but this does not necessarily imply hard bargaining by beating down salary payments to the lowest possible level. On the contrary, some companies pursue the policy of exceptionally high payments to executives, even to the point of generosity, in the belief that a good salary to a competent person is in practice a good investment which will be amply rewarded. The majority of employers realise that they get what they pay for; and in the long run, it is not the amount paid which is of paramount importance, but the relative return. With executives in whose power it lies to affect profits by their influence over subordinate staff, to save substantially on labour and materials, and to insist on high quality of workmanship and to maintain delivery promises, the scope for economies is immense, so that an investment by way of salary inducement may have highly satisfactory results. If it is agreed that executive work has a large element of individual character in it, that there is wide scope for additional profits, and that a poorly paid person is more hindrance than help, then the question of reward and the best method of individual encouragement is of first-rate importance. It should be recognised, however, that the mere payment of high standards of remuneration does not necessarily ensure commensurate results.

The decision to reward individuals according to their efforts raises the question whether periodic and permanent increases of

salary are to be made, or alternatively whether a regular or an occasional bonus is to be paid. While an increase in the weekly or monthly salary gives an immediate and regular reward, there are at least three serious objections to the continuous use of this method. First, most executive jobs have a fairly definite limit to the salary which can be paid and this will be reached sooner or later with the result that inducement to greater effort automatically ceases unless promotional possibilities exist. Secondly, periodic salary increases, usually made annually, serve as a stimulation for only a few weeks, as most men quickly adjust their standards of living to higher levels and rapidly forget their former positions. while it remains simple and straightforward to increase wages, a reduction—and reductions may be necessary—is a totally different matter. It has, in fact, been said that the aftermath of a salary reduction favours replacement rather than retention of the persons affected. In this connection also, it must be borne in mind that employers in good times are likely to favour generous salaries which in poor times they cannot afford. Experience in the U.S.A. demonstrates that where the good years resulted in ample rewards for executives, these were followed in poor years by exceeding embarrassment for employers faced with the necessity of making substantial cuts in order to carry on.

As opposed to, and distinct from, periodic and permanent increases in salary, the regular payment of a bonus has many advantages:

- (a) It overcomes those inherent dangers of salary reduction due to set-backs in profits resulting either from increased competition or economic circumstances, specific or general;
- (b) By payment either quarterly or annually, it presents better inducements to saving, and correspondingly smaller possibilities of being absorbed in the weekly standard of living;
- (c) By receiving the bonus as a lump sum, it is paid separately from salary and makes more impression as an incentive;
- (d) The bonus can take the form of cash or stock, and it can encourage investment by shares in the company, inducing a feeling of part proprietorship. In this case, where no other provision has been made for retirement, a position of financial stability is established for executives;

- (e) The bonus can be made dependent on current effort, thereby emphasising the need for continuous striving;
- (f) If the bonus is given subject to a minimum profit earned or prosperity enjoyed by the company, then cancellation of the scheme or non-payment becomes easier and less hard on the recipients.

In brief, the salary increase is fixed and rigid, and not necessarily tied up with current effort or economic circumstances; the bonus is flexible both to the individual and to the circumstances through which the company may pass.

58. Main Results to be Expected

The chief problem in the management of staff is to secure that continuous striving which not only accomplishes the most work but also develops executive capacity. Men can be spurred to action over greater or less periods, by a variety of devices, but none is so effective as, when properly administered, the monetary reward. Close supervision, for instance, may achieve creditable results, provided it is exercised continually and with flexibility. Prospects of promotion may stimulate a competitive spirit, provided the possibility is not too remote. Fear of dismissal or demotion and the fear of criticism or condemnation may also act as a deterrent to slackness. But all these measures tend to prevent lethargy rather than to promote initiative; they tend to insist on a minimum of work rather than to encourage the maximum of effort; they tend to act as correctives rather than stimulants; they are negative rather than positive; and more suitable for times past than for the future.

Monetary reward in business must be sufficient to ensure a measure of satisfaction both to the employer and to the employee. Salary is not an absolute figure but a relative level arrived at by a comparison with similar jobs in the same concern or in other companies. Depending on ability and the results achieved, the employer has the choice of rewarding executives either by a fixed standard salary which may or may not be subject to review annually, or by a fixed salary with a variable bonus based on individual or group efforts. With the provisions already made, that conditions must first facilitate the free expression of energy and initiative, the main results to be expected from the introduction of a financial incentive can be summarised briefly:

- (a) Attracts better quality staff;
- (b) Encourages retention of competent employees;
- (c) Promotes best possible individual effort;
- (d) Enables larger measure of contentment;
- (e) Facilitates executive teamwork;
- (f) Inspires continuous individual development;
- (g) Secures higher output, lower costs, and better quality of executive work;
- (h) Ensures better reception for improvements and suggestions.

If it is possible, by offering a financial reward for results, to make the executive regard himself as an integral part of his company, to view his department as a business within a business, to focus his attention on the essential of profit-making, and to appreciate the value of proper planning, adequate training, staff stimulation, and co-ordination of effort, then the standard of supervision and the fortunes of the concern are bound to improve thereby. The salary-incentive is not a solution for poor management or a substitute for incorrect methods. An incentive for staff should follow rather than precede those improvements in organisation which can otherwise be made effective. Pecuniary reward follows worthwhile results: it is compensation for savings, for greater output, or for better quality. The successful application of supervisory incentives depends on their soundness, on avoiding pitfalls, on providing ahead for eventualities, and on instituting a definite relationship between savings and rewards.

B. GENERAL CONSIDERATIONS

59. Extent of Distribution

In devising an incentive for executives, a preliminary issue is to determine who is to participate in the scheme. The incentive may vary from one sole commission for the chief executive to a profit-sharing distribution for all employees. While it is desirable for each person in a concern to be included under a definite incentive scheme, it is at the same time inadvisable for a large number to share in a common pool. Wherever possible each individual should be rewarded separately according to the results achieved specifically. Results on which remuneration is based should be attributable to functions for which the individual is

exclusively or chiefly responsible. For instance, the incentive for a factory manager would be based on general factory results, possibly profits; for a departmental foreman, on departmental results. Likewise, the sales manager would be compensated on general sales; the area manager on area results; and the representative on individual performance.

It is fairly common in business for the chief executives, such as the managing director and the general manager, to receive a commission on a scale determined by results achieved above a set standard. It is an almost universal practice for sales executives to receive a greater or less proportion of their salary based on sales secured. Only in a few cases, as yet, is a bonus paid to departmental managers and workshop foremen. In still fewer cases is an incentive offered to functional executives responsible for purchasing, personnel, design, planning, maintenance, and so forth. If variable financial inducement based on the achievement of certain specific results can be justified in principle for higher executives, it should be equally applicable in the case of lesser executives. The chief objection in practice to the extension of the bonus incentive to a wider circle of executives is the difficulty of establishing a satisfactory standard by which results can be measured. Before discussing this aspect, the basis for selecting participants must first be outlined. The following alternatives are available:

- (a) Those above a certain specified rank, e.g. established foremen:
- (b) Those above a fixed salary minimum, e.g. £300 p.a.;
- (c) Those above a fixed salary minimum with a minimum total of executive service, e.g. £300 p.a. with 5 years' service;
- (d) Those selected by the chief executive;
- (e) Those for whom a suitable standard of measurement can be devised.

The most suitable basis of selection, which may be any single one, or a combination of those listed, can be determined only by reference to the purpose the proposed incentive is expected to serve. It is necessary constantly to keep in mind the danger of giving rise to discontent among those excluded, and this can only be avoided by deciding on a definite and reasonable principle, and making it known to all concerned.

60. Relation to Salary

Having decided who shall participate, it is now necessary to determine how much in cash the incentive is intended to produce. The first question to settle is whether the bonus is to be part of, or an addition to, the standard salary. In most cases of remuneration to sales representatives, commission is commonly accepted as a part of salary. The arrangement may be a small retaining salary with a large variable commission, or a good standard salary with a relatively small commission, depending on circumstances. For other industrial executives, such as departmental managers and foremen, it is generally thought advisable to guarantee the customary salary for rank and responsibility and to regard the bonus incentive as an additional payment depending entirely on esults. The incentive is extra pay for extra effort. Although there is no reason why, in certain cases, salary should not be readjusted to permit the substitution of a variable bonus, it should be borne in mind that during certain periods bonus may not be earned, with the result that during such periods the individual would suffer a reduction of income. The executive should on no account be expected to take risks in regard to his standard guaranteed salary. An incentive should always imply the possibility of a larger income; it should be a special reward for better results; and it should be an addition to, and not a substitute for, a suitable salary.

The second question to settle in deciding how much shall be paid, is whether a low or a high bonus reward should be given. The amount of bonus to be paid must be determined largely by the value of results to be obtained. There can be no satisfaction to an employer in having to pay out more in commission than is justified by the results achieved. The small bonus has in its favour the possibility of continuity and regularity, the security of which appeals to older and steady executives with more or less fixed expenses and commitments. In practice the small bonus is favoured even for sales representatives of the more established companies with a fairly regular trade. However, a niggardly bonus amounting to less than 5 per cent of salary is likely to be more harmful than beneficial. It is inclined to incense rather than otherwise. The bonus must be large enough to be worth striving after, and must give some measure of satisfaction to the person exerting the extra effort, otherwise an incentive cannot be said to exist.

In favour of the high bonus is the fact that really substantial

rewards encourage exceptional effort. It has certain definite advantages, especially in emergencies when over a short period the fullest possible effort is required. For instance, if it is vital that a plant should be erected and put into working order as quickly as possible, a high financial reward for speed of completion may be entirely justified. Generally speaking, the high bonus reward is often accompanied by large fluctuations. There is a danger, too, in sometimes paying exceptionally large amounts in lump sums, for, human nature being what it is, the effect, instead of creating greater interest, often encourages bad habits. Men in such circumstances involve themselves in commitments in the hope and belief that their previous high earnings will continue; they spend recklessly; they speculate and gamble; and, their high earnings having been gained with relatively little effort on their part, they give less attention to their daily work and more to their private worries. In any case, the sudden drop from high rewards to negligible ones causes unfavourable reactions and discontent.

Provided results justify, bonus rewards should not fall below 5 per cent of salary and possibly not below 10 per cent for higher executives as the very low incentive fails to interest and incite, and will probably only irritate and incense competent officials. A moderate and normal incentive might be expected to fall between 10 per cent and 30 per cent of standard income. For exceptional results, achieved only occasionally, a high bonus, up to 75 per cent or even 100 per cent of basic salary might be justified. Rewards ranging over 100 per cent above salary are unnecessary and undesirable. Owing to the nature of supervisory incentives, some measure of control over excessive earnings must be exercised, but although anything in the order of bonus revision because of large earnings is to be deprecated, provisions must be made to permit of periodic adjustment necessitated by changing circumstances which may frequently bring about exceptional results.

61. Payment by Cash or Stock

Payment of the executive bonus may be made either in cash or stock. One or other of these forms can be used year in and year out, or the manner of payment may be made flexible to suit the prevailing financial circumstances.

The advantage of cash payment lies in its immediate effect upon the recipient and consequently it has a greater power as a stimulant,

especially in the first years of the scheme. The chief disadvantage of a monetary reward is that it is inclined to induce immediate or even prior spending (which will negative any advantage) and in the event of an anticipated cash bonus not materialising, this may even give rise to debt. With a fluctuating bonus, payment in cash is likely to cause undue depression in the case of small amounts and reckless spending when large sums are received.

The alternative method of paying the incentive reward in stock is sometimes preferable. This may be for the convenience of the company, it may be at the option of the recipient, or it may be adopted in order to create a sense of partnership or proprietorship in the business, although the effect of this must not be over-estimated in view of the holdings, which will be relatively small. Stocks or shares awarded as an addition to regular salary may be transferable or non-convertible, and may be deferred, ordinary, or preferred. Dividends on employee holdings may be fixed beforehand with a special issue, or vary with the class of share distributed. The shares distributed may be those of the employing company, government stock, or investment with an insurance company.

Stock is a weaker spur than cash, for its long-term reward lessens its effect on daily performance. Where no other pension scheme exists, stock ownership is likely to be attractive to the older employee, supplying him with financial security against retirement. The company can also depend on the continued serwices of staff with a mounting stock holding. With the younger executive, stock payment is not so attractive as it does not compensate him when he most needs compensation, and it tends to tie him to the one place of employment when promotion might come more quickly elsewhere. The reward of effort by the distribution of shares is particularly favoured in good times when, apart from the award of additional stock, dividends are also high. In poor times, however, there are neither shares nor interest. Shareholding encourages long service in employees, and has a continuous power as an incentive. The chief disadvantage of executives holding stock in their employer's company is that they are expected to share the company's commercial risks, and in the event of reconstruction involving writing down of value, or in the case of liquidation, the acquired stock may be substantially reduced or may vanish altogether. This demerit is sometimes overcome by

awarding gilt-edged stock or insurance investment fully secured. Any conditions imposed regarding the withdrawal of shareholdings also minimise the incentive.

Closely allied with the form of distribution is the frequency with which payments are made. Cash payments can be paid more frequently than stock awards as the latter are usually dependent on profits declared annually after the issue of the auditor's certificate. An incentive is strongest and most effective at the time of payment. Consequently, the longer the interval between payments the greater is the period of comparative ineffectiveness. Bonus distribution should be less frequent than salary payments, and should be made separately from them. As in the case of salary, there is a greater need for frequent payment of bonus with the junior executive than with the senior. Thus foremen normally paid weekly might receive a bonus on performance either fortnightly or monthly; a manager paid monthly might receive a separate award quarterly or half-yearly; a director paid quarterly usually receives commission annually, sometimes with provisions to draw on account. In all cases the common practice is to pay incentive rewards separately from salary and to facilitate payment as soon as possible following the period to which it refers. If an incentive is paid at a different time, and separately, from regular salary, it emphasises its special purpose and facilitates saving. To meet these requirements, arrangements are sometimes superimposed on the regular scheme in order to steady and equalise bonus earnings by the creation of a special fund for the purpose.

62. Fluctuating or Constant Incentives

Although the purpose of an incentive is to reward effort, the continuous application of energy depends on the amount of the reward: if it is too small there is the possibility of discontent; if it is too large there is the danger of distraction. Consequently, it is a matter of some importance to determine the degree of fluctuations likely to ensure continuous striving at the highest possible level.

While incentive rewards which fluctuate widely are to be discouraged, there are many disadvantages in the steady and regular bonus. An incentive which is too consistent is soon regarded as part of salary and gives no advantage to the employer over an ordinary increase in remuneration. Not only is it necessary to

avoid regularity in the amount of bonus rewards, but it is also important to prevent steady commissions over extended periods.

Fluctuations in amounts of payments are desirable, but it is essential that their range be limited. Energy applied, however, must bear some relation to results and these in turn should have a definite bearing on the reward. A period of exceptional effort with unusual results might appropriately carry a relatively high bonus.

In order to exercise some control over a financial incentive for executives, especially where the basis is likely to produce uncertain results, it is common to guarantee the arrangements for a specified period. Although it may be the company's intention to continue the incentive indefinitely, it is usually advisable to insist on a temporary trial period. Where the permanent arrangement encourages the executive to achieve the best results as quickly as possible, the temporary scheme discourages a full initial effort in the belief that any subsequent plan will be modified inversely with the early results obtained. In spite of this admitted disadvantage, a company must reserve the right to modify the details of its executive bonus as circumstances change. The need for periodic review and revision will naturally depend on the basis of the incentive and whether it has been fundamentally sound in taking into account future possibilities.

The ideal executive incentive should be neither too high nor too low; too fluctuating nor too steady; too temporary nor too permanent. It should follow a balanced middle course, and avoid extremes.

63. Individual v. Group Reward

The decision as to whether an individual or a group incentive is to be preferred depends primarily on the category of executives under consideration; the character of their individual effort, and its bearing on the work of others; and the purpose to be served by the financial inducement offered.

Individual incentives provide the greatest spur to individual effort. A foreman given a bonus on the results obtained in his own department cannot be expected to concern himself with the affairs of other departments except in so far as they affect the results he can achieve. Incentives arranged on this basis may give rise to intense individualism with considerable personal friction

arising. There will be only limited co-operation between departments when each man strives for himself. Where the broader interests of the company depend on a large measure of interdepartmental collaboration, these are likely to suffer. When departments are self-contained and independent, an individual incentive might prove the wiser choice.

The group bonus, where each participant shares equally or on some other definite basis, but where the share of each is dependent on combined results, is likely to prove less attractive to individuals than where the results and rewards are computed separately, and has less influence on their efforts. With group sharing there is always the danger that those contributing above the average slacken because their extra effort rewards them only partially. There is always the possibility of dispute arising between those who contribute the greatest effort and those who refuse to respond to any stimulant. Then, too, participants are likely to criticise the efforts, decisions, and judgments of others. The primary purpose of the group incentive is to stimulate group action; to encourage cooperation; and to emphasise mutual self-interest. Group incentives are intended to improve the machinery of co-ordination; to facilitate inter-departmental collaboration; to encourage the exchange and transfer of work and staff; and to further co-operation with management and men. Provided the main purpose of the incentive is to obtain better results through greater interdepartmental co-operation, and provided the danger of disruptive criticism between participants is kept in check, the group-sharing bonus for executives offers many advantages.

64. The Systematic Scheme and Arbitrary Distribution

Arising out of the group incentive there are two alternative methods of distribution; the systematic, and the arbitrary. Under the systematic arrangement, the common fund can be divided equally between all the participants, or the amount paid to each may be computed with reference to existing salary, rank or responsibility, or number of years of service; or it may be decided according to some fixed pre-determined proportion which has been made known to those sharing.

In introducing an executive incentive, any fundamental issue, such as the manner of distributing the fund, which may prejudice the full acceptance of the plan from the start, must be avoided.

For this reason, many companies prefer to make an equal distribution of the common fund. The chief objection to this arrangement is that some persons, because of their abilities, can contribute to results more than others in the same group. This is obviously true in many cases, but in support of the equal-share plan it is contended that differences in ability and the necessity for acknowledging greater responsibility are fully recognised in the variations existing in set salaries. In order to avoid justifiable grievance, the sharing group is usually made up of executives of similar rank, such as foremen, and excludes highly placed managers on the one hand, and more subordinate charge-hands on the other. There is no reason, of course, why separate groups should not exist and receive separate funds according to their varying results. Such groups might also function side by side with individual incentives for other executives. The arrangements made can be flexible according to circumstances. If, for the purposes of simplicity or convenience, it is decided to include senior and junior executives in the same group, it is sometimes decided to divide the common fund in proportion to set salary. Where service is an important factor and one to be encouraged, the method of distribution is modified to take this into account to some small extent. The characteristic feature about all these arrangements is that details must be decided, definite, and made known to all those participating.

In order to avoid the criticism and discontent which are likely to arise over the computation and distribution of the bonus fund—for, however impartial the decision, certain individuals are likely to fare better under an alternative arrangement—an arbitrary method of distribution is sometimes adopted. Under this plan the recipients may or may not be told the basis of computing the fund, but the method of distribution is left to the arbitrary decision of the chief executive, aided in some cases by advisors. The main objection to the arbitrary sharing of a common fund is that however impartial the attempt, there are always complaints, either verbal or implied, that favouritism prevails. If the amount paid to each person is not made known, suspicion arises and discontent follows. Much of the advantage of an incentive is lost if an individual has no comparison with others in similar positions, and cannot judge whether his efforts have been favourably reviewed or fairly rewarded. In any case, there often prevails the thought that reward is determined more by power to impress the chief executive than by capacity to improve

the department. An arbitrary distribution often savours of a gift given by the directors rather than of a reward earned by the recipients.

Although the systematic scheme usually suggests the publication of details to the recipients concerned, and the arbitrary arrangement often implies the withholding of essential figures, this may not necessarily be the case. For instance, under a systematic plan the method of distribution may be made clear, but the computation of the fund may be kept secret. This issue arises where the bonus fund is based on profits and where for one reason or another it is thought inadvisable to divulge the amount of, or the details incurred in arriving at, profit. Wherever possible it is preferable to disclose the details of calculating bonus so that no doubt may exist that results are rewarded fairly. For an incentive to be fully effective the recipient should be able to measure his progress and judge the results of his efforts and so compute their meaning in bonus reward. Everything favours the simple, straightforward scheme, where the facts and figures are available equally to the chief executive and to the recipients, where progress is measured impartially and reward is administered fairly.

One of the chief reasons supporting the secret plan of distribution is the lack of suitable and comparable figures of individual contributions to results. If there are no accurate figures for a published plan, then the judgment of the person deciding on individual shares is likely to be correspondingly inaccurate. Any contention of unfairness reflects unfavourably both on the authority concerned and on the work of the recipient. Suspicion and doubt spread in the minds of those receiving a bonus is bound to lessen the effect of the incentive. The plan with undivulged details should be employed only as a last resort where it may be the only practicable solution or where it serves usefully a temporary, immediate, or unusual purpose.

C. BASIS OF DISTRIBUTION

65. Setting Up Standards of Performance

Business directors favour in theory the payment of executives according to results, but are deterred in practice by the difficulty of setting up sound standards of performance. An incentive must be distinguished from a gift: with the former, payment is made

according to a set formula based on results accomplished; with the latter, sums are distributed depending on the general results of the company and the generosity of its directors. An incentive, on the one hand, is an addition to salary; it must be earned and its amount must be determined by results measured in production or savings. An indefinite bonus, on the other hand, may form part of salary; it may result from a prosperity arising from price changes and other circumstances over which the individual may have little or no influence; and it may be compensation for excessive overtime. The chief concern is with the supervisory bonus as an incentive, not as a gift. After deciding on the persons to be rewarded, the extent to which they might participate, the most convenient manner and period of payment, the preference for group or individual reward, and so on, there remains the more difficult problem of settling the basis of bonus computation.

The standard of performance required as a basis for a supervisory incentive might first be decided in its relation to the company's most important demands from its executive staff; it must also be decided whether it is to be immediate and temporary or continuous and permanent. Volume of production, regulation of flow, improved quality, saving in time of operation, reduction of labour cost, economy in materials, maintenance of plant, etc. must all be taken into account, and it must be carefully considered whether one of these in particular is predominant, whether a combination of two or more is preferable, or whether all are essential to the formation of a sound basis that will ensure profitable and satisfactory working.

The second issue which bears substantially on the most suitable basis to adopt is the degree of influence on the desired results that can be exerted by executives individually or collectively. In this case, the results on which bonus is computed must to a large extent be within the control of those receiving the reward. The results should not be unduly influenced by, or be dependent on, factors outside the control of the recipients unless due allowance is made for such factors. For instance, departmental production measured in cash turnover may be greatly influenced by prevailing prices, which may rise or fall, and thus greatly affect the results, owing to economic circumstances over which the manager or foreman has no power of control. An incentive becomes a gamble if its final results and rewards are subject to conditions which do

not fairly accurately reflect the real accomplishments of the recipients.

A third point should be made quite clear: an incentive bonus is paid on results, not on effort alone. The executive must direct his efforts to those factors which will achieve results.

Fourthly, care should be taken in selecting one or two narrow aims for special reward so as to avoid action which will improve the factors chosen at the expense of other aspects excluded.

Lastly, the standard of performance selected should permit the exercise of unlimited and continuous effort, otherwise as soon as the point is reached where restriction is imposed, the incentive will cease to have effect.

The various bases available for the measurement of results fall into two classes: group and individual incentives. Both have their advantages, depending on the purpose the incentive is to serve. They can now be examined chiefly in relation to foremen where the aim is to encourage maximum effort and to make a fair and just reward, with due consideration both of the individual and of the company.

66. Group Incentives

The group incentive stimulates collaboration, tends to break down watertight compartments, and encourages inter-departmental transfers of staff. There is a greater willingness to make departmental adjustments to fit in with the general plan. The group incentive is usually based on profits or production.

A. Profit-sharing

Some companies prefer profit-sharing as a basis of bonus distribution to its senior executives and supervisory staff because it links up the fortunes of the individual with the prosperity of the company.

Against its disadvantages, which may be said to be chiefly in restricting bonus payments to times of prosperity, there is the contention that the greatest effort and the most rigid economy are required when profits are not so plentiful. Wise policy and good direction might contribute more to profits than managerial or supervisory effort, in which case bonus payment is not a proportional reward for increased endeavour. On the other hand, the striving of supervisors to make profits might well be thrown

away as the result of unwise policy or managerial ineptitude, and in any case they depend in a large measure on market conditions. For the earnings of supervisors to depend on such factors as these savours of a gamble. There should be no great or avoidable element of risk in an incentive which provides rewards for greater effort.

In order that the bonus should be earned intelligently, all relative information should be provided. This means disclosing not only particulars of profits but also details of income and expenditure. It stands to reason that, unless the foreman has a fairly clear conception of how profits are made and lost, he cannot be expected to regard a bonus other than a gift calculated in a manner he is quite unable to understand. Most companies would seriously object to their accounts being inspected by foremen. Apart from this aspect, there is the question of inviting criticism of expenditure and policies which are not the executive's concern. There is another serious objection to profit-sharing: if bonus payments are made either yearly or half-yearly, the period is too long to maintain interest at its highest peak and to provide that constant stimulation which comes from more frequent awards. Payment should follow as soon as possible after the effort which it awards.

Profits are highly fortuitous. So many general trading factors are involved that it is difficult to assess that portion due to good management and still less that due to good supervision. Further, profits are greatly affected by policies of reconstruction, depreciation, and so forth. Foremen generally are too remotely concerned to be regarded as having other than casual or superficial influence on net profits. Then, too, a company may make a loss or only a small profit, but this may not be attributed to the foremen. After a succession of bad years, shareholders are unwilling to consider extra compensation until after past dividends have been repaid. Profits, although the best guide to prosperity, are too general and unreliable, except as a last resort, to serve as a satisfactory basis of executive reward, especially for foremen.

B. Production Measured by Turnover

To overcome the objections to a bonus based on profits, a group incentive may be provided on production performance measured by turnover. By this means, many fluctuating expense items such as sales, prices of materials and wage rates, which cannot altogether

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be controlled by the foremen, are excluded. Production measured by turnover provides an accurate record which cannot be disputed, as it is compiled by accountants and not by works staff. Generally, turnover in cash is to be preferred to output in orders; it correctly takes into account the varying sizes of orders or products, and, if the labour cost percentage is similar for the products manufactured, reflects fairly accurately the amount of work done. Where the purpose of the incentive is to obtain production, turnover provides many advantages for a group incentive to executives.

The chief objection to an exclusive emphasis on production is that the results might be obtained by uneconomic employment of men, materials, and machines; for example, by inducing the foreman to employ expensive labour and to work excessive overtime. An incentive on turnover completely disregards costs. These objections might be overcome by a vigorous general management, but it should be borne in mind that a supervisory bonus is intended to lighten the burden of management, not to make it heavier. If an incentive needs continuous correctives it loses its value.

Where the cost of labour and materials can be standardised and controlled without additional expense, considerable gain might be secured by greater production, and the savings on overhead expenses could be partly employed to reward the foremen.

Another disadvantage of turnover as a measure of production is that changing prices are likely to cause automatic change in turnover, with a corresponding effect on bonus. Adjustments can be made in the basis of the bonus payment to accommodate fluctuations in price, but frequent modifications of this kind are not advisable.

With all incentives, consideration must be given to the effect of changes over which the participants of the reward have no control. Turnover may be greatly increased by the erection of new buildings and the installation of additional plant, the introduction of modern machinery and labour-saving devices, simplification of system, new inventions and designs, and improved lay-out.

C. Personal Rating

By whatever method a general bonus fund is created, there remains the question of equitable distributions. The alternatives available are:

- (a) By judgment of high official where the chief executive decides the amount each is to receive based on a combination of individual results available, reports, advice of senior executives, and personal opinion;
- (b) By apportionment according to the percentage individual salary bears to combined group earnings;
- (c) By classification into groups each with a predetermined percentage;
- (d) By equal share to each person participating.

The best method to adopt will depend largely on the soundness of existing salary administration. It may be desirable to correct inequalities in conjunction with the additional bonus reward when the underpaid would receive a higher share than the overpaid. However, where any salary adjustment is necessary, this is best carried out before rather than during the course of bonus distribution. The impartial judgment of a high official is only to be adopted as a last resort. It is far too arbitrary and always suspect by the recipients, and this minimises the possible influence of the incentive.

Decisions are generally made from the three remaining alternatives, depending on the range of executives sharing in the common fund. They have in common the advantages of being simple, easily understood, and systematic. It is advisable to take into account that salary differences may already indicate a true differentiation of worth without further emphasis by bonus distribution. Some salaries may be already unduly high owing to fictitiously inflated wages or to past conditions, and these should not be further exaggerated by a bonus based on percentage. On the other hand, grouping may be necessary where higher executives are able to contribute more substantially even than salary difference to the common results than lesser supervisors, and are thus entitled to special consideration.

Personal ratings, however impartially or scientifically they may be carried out, are always subject to accusation of favouritism which must be avoided if the incentive is to work satisfactorily. The distribution of the common fund must raise the least possible discontent or disappointment among its recipients. An incentive is likely to do more harm than good if friction arises over distribution, as with relatives over a will.

67. Individual Incentives

An incentive for individual results is often to be preferred to group sharing of bonuses as it rewards each person according to his own efforts. The common complaint against group-sharing schemes is that earnings made by those above the average are shared with those below the average. An incentive is employed to obtain that greater effort and drive which makes all the difference between doing a job and doing it well, and it is often contended that better results accrue from individual reward than from group sharing. For the purpose of individual or departmental incentives a number of alternatives present themselves.

A. Cost Reduction

Lower costs contribute materially towards higher profits and a person achieving this result may be rewarded by a share in the savings made. Three kinds of costs usually form the basis of an incentive for savings, namely: Direct Labour Costs, Material Costs, and Indirect Costs. Depending on circumstances, an incentive might be provided for any one of these or any combination of them.

Once the basis has been declared, the problem of the supervisor is made clear in that he must economise in materials, labour, and overhead expenses. If one item of cost such as labour is singled out for special reward, care must be taken to avoid better results in this direction at the expense of some other, such as material cost. An incentive on general cost reduction is to be preferred to avoid this possibility. Here, again, difficulties arise in practice due to changes in market conditions over which the supervisor has no control. Rises in the rate of wages or in the prices of raw material might be allowed for, but adjustments are liable to be regarded as unfair. An incentive is a delicate instrument which might easily do harm if enthusiasm changes to dissatisfaction. The basis of the incentive must be sound if it is to do its work properly. If its working or adjustment introduces any suspicion of injustice, results might be better if it had never been introduced. For this reason an incentive should be constructed to continue for some substantial period of time, not less than one year.

B. Increased Output

Where essential labour and material cost have been standardised and do not offer great possibilities of reduction, an individual

incentive can be introduced with departmental output as its object. Where departments form a sequence of operations it is not possible to express the contribution of each in items of cash turnover, and it is more common to express output as units or weights. This is a satisfactory measure where the work of the department is confined to one product or to products which do not vary to a great extent. Where there is a wide variety of work it is sometimes possible to weight the different classes to obtain a comparable indication of production. Unfortunately, output figures are often compiled departmentally and are not so reliable as those of turnover which must be reconciled with the general accounts.

Another method commonly employed is to pay the supervisor a ratio of the average bonus earnings of his department, assuming that the operatives themselves are paid on an incentive basis.

One of the chief objections to an incentive based on departmental output is the same as that cited against production measured by turnover. Results are dependent on a more or less unlimited supply of work. Departmental output is not only dependent on this general supply of work but also on the supply from preceding departments and on the capacity of acceptance in those following.

C. Better Quality and Other Incentives

A financial incentive to supervisors is a legitimate means of correcting any outstanding weaknesses which cannot easily be cured by other means. Quality of workmanship is one of the main aspects of production to suffer when greater output is demanded. In many industries quality is more important than increased output, especially where the cost of raw materials is high and where work not up to standard means sheer waste. Quality can be measured in many ways. The proportion of rejects is perhaps the most common. Where quality cannot easily be measured in this way, the number of customer complaints, the amount of customer compensations, or the cost of servicing and repairing manufactured articles not satisfactory after sale, can be taken as fairly sound indices of quality or lack of quality. Where companies operate under intensive competition, customer dissatisfaction means lost trade and a loss of goodwill. Sometimes this aspect may be singled out for a special incentive, but at the same time, there must be some definite link with costs of production and extent of output.

Other incentives might be constructed to deal with any special problem in a company, a trade, or a department; for example, the question of labour turnover. The executive's influence in this direction is greater than is usually supposed and in times of severe labour shortage it is important to place a brake on supervisors who are unable to retain staff.

D. Point Plans

With modern methods of production control and labour measurement, output in a number of factories has been computed on a point basis. The standard is usually the amount of work performed per minute at moderate speed after the elimination of unnecessary waste in time and movement and after reasonable allowance has been made for fatigue. By reducing all processes of production to a common expression of standard minutes, most of the difficulty usually found in dealing with varieties of products is overcome. The output of a department is converted into standard minutes of effective work, and in this way is rendered comparable with that of other departments. Varying rates of wage payment, which are usually beyond the control of the foreman, are left out of consideration. The amount of direct and indirect labour costs can be computed separately. The labour efficiency of a department can be thus accurately determined in relation to an established standard.

Under one arrangement of this plan, the supervisory and servicing personnel share in predetermined proportions with the productive operatives the reward for performances in excess of standard. Another arrangement pays the total earnings over the established standard of performance to the operative, while rewarding the foreman according to departmental efficiency achieved, the amount being determined from a prepared scale. A third arrangement takes into consideration not only the efficiency of productive workers, but also regulates the relation of indirect to direct labour costs.

Provided time-study measurements are computed competently, departmental performance is not subject to artificial inflation due to price variations or alterations in the character of work. Results are not calculated entirely from records under the control of the foreman, but computed and reconciled in the office.

The incentive provided by the point plan measurement of

labour gives the foreman a vital interest in the efficiency of the department and in the earnings of his operatives. The point plan not only provides a sound basis for the reward of supervisor and operative, but permits of accurate departmental control where loss of time is recorded with a view to its reduction.

Where material is an important cost item and is not otherwise controlled, this aspect may have to be dealt with specially to avoid undue waste. Some control may also be necessary over maintenance to avoid undue wear and tear of machinery and equipment.

An advantage of remunerating executives according to departmental efficiency, indicated in points, lies in the reliability of results. Besides, proportionate compensation to the foreman overcomes possible resistance to new methods and prevents any discontent due to increase in the wages of operatives as compared with his own. A disadvantage may arise when decisions are left to the discretion of the foreman who may tend to favour higher earnings to operatives, and thus to himself, rather than maintain a proper regard for the interests of the company.

68. A Typical Scheme

In the formulation of a plan, the first issue to consider is the aim it is intended to serve. This may be general, such as works or departmental profit, or specific, and applied to some feature or combination of features of production. It is thus advisable to list those factors in production which are regarded as most important or most likely to benefit from a financial incentive, and the following points might be considered:

- (a) Increased output;
- (b) Better use of plant;
- (c) Reduced costs—direct, indirect, labour or material, and overheads:
- (d) Improved quality of workmanship;
- (e) Less scrap and waste, and fewer errors;
- (f) Speedier service of throughput; (g) Reduced labour turnover;
- (h) Lower maintenance costs.

The second issue is to settle the general considerations of the scheme. It must be decided whether the incentive is to apply individually or collectively; whether improvement can be achieved best by raised status, by an increase in salary, or by the payment

of bonus. It is also necessary to decide whether payment is to be prompt or deferred, and whether bonus is to be paid weekly, monthly, or quarterly. It must also be decided as to the minimum result below which no payment will be made, and the maximum payment it is proposed to make, so that the incentive will not fall out of the intended range.

The third issue concerns the data available or which can readily be made available. It is not advisable to involve considerable clerical cost in the calculation of the incentive for this purpose alone, and such control figures as are available, suitable, and reliable should be used.

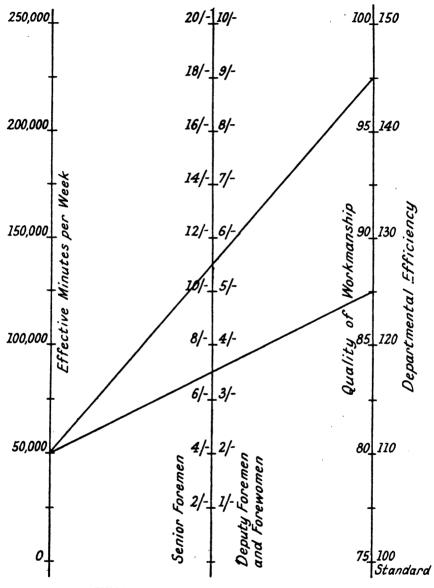
The construction of the typical scheme may be based on raising output, reducing direct and indirect labour costs, improving quality, and making individual payment on separate departmental results.

In a general scheme, applicable to all supervisors according to their departmental results, and based on a common scale of award, a typical plan is illustrated in the accompanying alignment chart. Production is measured in effective minutes per week; departmental efficiency is computed by reference to an established standard; quality of workmanship is determined by the proportion of rejects, scrap, and so forth. Thus, a department with a measured production of 50,000 effective minutes and a departmental efficiency of 25 per cent above standard produces a figure of 7s. The same department with a quality of workmanship of 97½ per cent provides a figure of 11s. The incentive paid is the mean of these, namely 9s. The larger the department and the greater the effective minutes, and the higher the quality of workmanship and departmental efficiency, the better will be the bonus earnings. Such an arrangement takes into consideration, and makes adjustment for, the small department as well as the very large one. It compensates for departmental efficiency and for quality of workmanship. The foreman's bonus is limited by the scale, which is predetermined. Differing scales can apply to varying grades of foremen, forewomen, or charge-hands.

Certain further refinements can be made by introducing correcting factors to adjust the effective minutes for different types of product, different sizes of orders, changes in process, highly repetitive work, or for variations in patterns or batch sizes. Adjustments can also be made to reduce the effective minutes where assistants are employed, as in a large department.

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Payments would be made monthly, based on the four preceding weeks. Arrangements should be made to advise each foreman as to the manner of bonus computation, either before or



TYPICAL BONUS CHART FOR FOREMEN.

when payment is made. Special provisions would be made for night work and excessive overtime. Premium bonus would be continued during two weeks' annual holiday, and for the first two weeks of any illness, or absence due to accident at work.

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D. PRINCIPLES OF APPLICATION

69. The Problem of Incentives

The old idea of wages as the minimum amount necessary to secure and retain a man's services has given way to the method of incentive payment, where remuneration is made sufficiently attractive to exact a continuous and maximum effort from employees. Men vary considerably in their individual characteristics and reactions; but, speaking generally, if wages fall below a certain level the employee will be disgruntled and discontented, and if they rise above a certain limit, he tends to become self-satisfied and complacent. Between these two levels there lies a point where continuous maximum effort is accompanied by minimum unit cost.

Industrial incentives are concerned with maintaining a high level of dependable performance. It is not sufficient to have occasional spurts of energy with long periods of comparative relaxation. The problem of incentives in industry is to discover the economic level of wages which ensures maximum effort, and to devise means of reward which will encourage continuous striving.

The point at which incentives give optimum results is neither fixed nor stable. Wages for any group of employees is relative to and comparable with those of similar skill in the same company or elsewhere. With an improvement in wages of operatives, it is necessary, if grading is to be maintained, to make adjustments in the salaries and conditions of supervisors to whom the operatives are responsible.

According to the number of subordinates, the range and degree of technical knowledge, experience, and proficiency, the foreman's wages should be in the order of 50 per cent above the average earned by operatives. The problem of incentives is to decide whether the maximum effort and the lowest cost of departmental production are achieved by remunerating the foreman with a fixed wage, or with a standard salary and a fluctuating bonus.

Where a fixed wage has been in existence for some time with reasonably satisfactory results, there is naturally some reluctance to give up something known for something unknown, which accordingly inspires doubt. Where human relationships have been satisfactory between the management and the foremen, and between the foremen and their operatives, care must be taken to preserve this. Unless the financial incentive is sound and suitable, there is

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a danger of disputes and dissatisfaction arising over the basis of computation or the amount of the reward. It may also encourage executives to concentrate exclusively on bonus-earning factors and to neglect those excluded. It may tempt the foreman to make adjustments with a view merely to advancing personal compensation without commensurate benefit to the company, and it may encourage him to take unnecessary risks with plant and operatives for the sake of personal gain. Further, objections may be raised as to the cost of administering the scheme with its additional records, and the trouble of reviewing and adjusting the plan as this is made necessary by changing circumstances.

In spite of such possible objections, the higher management is usually in favour of financial incentives, and in practice may be deterred only by the difficulty of finding a suitable basis. This applies also in the case of manual workers, as well as foremen, especially those who are classed as indirect operatives. Recent years have seen rapid growth in the extension and application of financial incentives. Starting with workers on repetitive operations, it is now found possible as well as profitable to introduce suitable incentives for those engaged on highly skilled work such as tool-making, as well as general labourers.

Monetary reward is not everything, but it is a powerful incentive to make men work willingly towards a common goal and in their own interests. To do its work properly, an incentive must be sound, and this implies conformity with accepted principles, and suitable application. A financial incentive cannot be adopted blindly merely because it was successful elsewhere; there must be flexibility in the application of the principles and practices.

70. Flexibility of Application

The application of incentives for executives, as in the case of operatives, is an administrative device to secure better personal performance. As with payment by results for skilled and semi-skilled operatives, there is no single fixed method which is best in all cases. Applications are made according to individual circumstances, and their suitability depends on the soundness of the basic principles involved. In the same way as highly developed techniques have been built up for piecework ratefixing, so must exact principles be employed in setting up executive incentives. The past twenty years have seen, starting slowly in a small way

and developing quickly and extensively, rough-and-ready time estimates turned into truly scientifically rated standard times, and rule-of-thumb bonus schemes transformed into point plans for labour control. To-day, incentives for executives, if employed at all, are inclined to be casual and arbitrary; but concentration on their potentiality will bring about wider experience from which to draw, in order to establish a technique of application. It is possible, even now, to evolve leading principles and policies to guide present-day practice:

- (a) The purpose of the incentive plan requires precise clarification.
- (b) The requirements of the financial reward should be settled:

 (i) as immediate or sustained; (ii) regular or remote payment; (iii) for co-operation or individual effort; (iv) small increase or large lump sum; (v) group or individual distribution; (vi) systematic or arbitrary division; (vii) payment in stock or cash.
- (c) The scheme should be definite, should not be subject to constant variations and adjustments, and should be guaranteed at least one year ahead.
- (d) The basis should be straightforward and easily understood, and clearly set out in writing.
- (e) The basis should be founded on past results and future possibilities, and a definite relation should exist between savings and rewards.
- (f) The incentive should be based on careful job analysis so that the results reflect as nearly as possible the work involved.
- (g) Bonus earnings should be paid in good faith, irrespective of the amount and of the original intention.
- (h) Bonus earnings should reward the participant individually if possible, and always according to his contribution, and should be confined to results over which he has a large measure of control, other factors being standardised or stabilised.
- (i) The basis should be sufficiently broad to ensure general benefits to the company and should avoid any incitement to advance certain interests at the expense of others, i.e. it should encourage co-ordination.
- (j) Bonus earning should begin only after standard results have

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been achieved, so as to emphasise the reward of the further improvements effected.

- (k) The bonus should bear some relation to the grade of responsibility.
- (1) The methods of achieving results should be set out, giving guidance and encouragement towards higher earnings; bonus should be paid frequently, either monthly or quarterly, and in separate envelopes; relevant figures of results should be supplied and helpful comment given.
- (m) Provision should be made for revision and adjustment as circumstances warrant.
- (n) Introduction should follow the prior application of non-financial incentives and after foreseen improvements in methods of work have been carried out.
- (o) Consideration should be given to the dangers of discontent arising among executives, the adverse effect on operatives, and possible damage to plant detrimental to the company's best interests.

In addition to the application of the principles set out above, all bonus arrangements must deal with certain issues and provide for certain contingencies:

- (a) Whether the scheme is to apply to departments individually or to the company as a whole;
- (b) Whether production is to be based on past performance or compared with a planned budget;
- (c) Whether results are to be based on the output of direct or indirect workers, or on their combined production;
- (d) Whether performance is to be measured by cash turnover, profit, or production in weight, units, time, or cost;
- (e) Whether direct and indirect labour, materials, and oncosts are to be treated separately or collectively;
- (f) Whether foremen are to be rewarded individually, or as a group with equal shares or in unequal proportions;
- (g) Whether size of the group supervised or the number of charge-hand assistants, or the relative importance or technical character of the work is to receive separate consideration;
- (h) Whether bonus will be calculated on weekly, monthly, or quarterly periods, and whether it will be paid immedi-

ately or deferred to allow the figures to be checked and reconciled;

- (i) Whether bonus is to continue during annual holidays, sickness, or absence through accidents at work and if so, the time-limit to be specified;
- (j) Whether excessive overtime is to be dealt with separately, or provided for, in the bonus;
- (k) Whether breakdowns, transfers, or other unforeseen emergency measures are to be provided for, or are to receive separate consideration as circumstances demand;
- (1) Whether night-work or day-work, male or female supervisors, senior and junior foremen, are to be provided for specially.

Incentive schemes can be simple or complex; they can apply to one single aim, such as profits or production, or by predetermined proportions can cover many specified factors. One company, for instance, making use of an incentive scheme, takes into account departmental hours, time-keeping of men and foremen, scrap and spoiled work, defective workmanship, cost of cutting tools, cost of indirect labour, percentage of day work, lost machine hours, safety, and, in addition, the foreman's rating as determined by his superior.

Several other factors need consideration in special cases. Apart from increasing wages and rising prices generally, war-time conditions have, with companies working on Government contracts, created prices which tend to vary, prices based on actual costs plus a fixed rate of profit, and prices subject to costing investigation and adjustment. Prices are also controlled by the Board of Trade. These and other war-time emergency measures may either upset an existing incentive arrangement, especially if based on cash turn-over or net profits, or may restrict the working of a proposed plan in the post-war uncontrolled period. The higher rate of income tax also has some bearing on salaries and bonuses, and the provisions of the Finance Acts may have to be taken into consideration. These features have to be regarded as emergency measures of a temporary nature, and must be provided for separately in the incentive scheme.

In general, far too little practical experience is available on the working of financial incentives for executives. Industry would

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benefit greatly by a statistical analysis and detailed description of successful schemes, and this could best be carried out by an independent research body with a questionnaire inquiry, followed by careful investigation. One such inquiry was carried out in the United States of America some years ago by Professor Balderston, who confined his investigations to managerial profit-sharing.

In 1943, Harold Whitehead & Staff Ltd., Industrial Consultants, made a Survey and Report on "Incentive Bonus Schemes for Indirect Workers". This was based upon a questionnaire inquiry, which dealt with many industries separately and collectively, and discovered that in the companies reviewed, 43 per cent had installed bonus schemes of one kind or another for charge-hands, foremen, and other supervisory grades. It is significant that the percentage of the concerns in the various industrial groups which had bonus schemes covering these grades of labour varied considerably and were as follows:

					Percentage		
Engineering—light	•	•	•	•	•	52	
medium	•	•	•	•	•	56	
heavy	•	•	•	•	•	40	
precision	•	•	•	•	•	60	
Chemicals		•	•	•		67	
Printing and Carton-m	aking	•	•	•		29	
Textile and Clothing	•	•		•		Nil	
Food and Tobacco	•		•	•		25	
Other industries (Glass,	Woo	odwo	rk,	etc.)		45	

Of these schemes 90 per cent were based on a variable bonus and 10 per cent on a fixed bonus. In all categories of labour it was found that the bonus averaged 22 per cent above the standard rate, the amount varying in the industrial groups to the following extent:

					Pe	ercentage	;
Engineering—light	•	•	•	•	•	26	
mediu	\mathbf{m}_{i} .	•	•	•	•	37	
heavy	•	•	•	•	•	32	
precisi	on .	•	•	•	•	15	
Chemicals	•	•	• "	• .	•	18	
Printing and Carton	-making	•	•	•	•	7	
Textiles and Clothir	ng .	•	•	•	•	11"	
Food and Tobacco	•	•	•	•	•	14	
Other industries (Gl	lass, Woo	odw	ork, e	tc.)	•	20	
•				-		1	

For foremen and charge-hands, the bonus was based, in 61 per cent of the cases, on the efforts of the direct workers, most usually measured by the bonus earned or by the production achieved by these direct workers; in 31 per cent on the combined efforts of the direct and indirect workers, usually based on the companies' financial results; and in 8 per cent on the results of the foremen and charge-hands, individually or collectively, based on general considerations of diligence, good timekeeping, etc.

Such an investigation is of great value in indicating the general trend of practice, especially if the conclusions reached are confirmed by other inquiries. In all cases, it is necessary to bear in mind the nature and size of the sample taken. Further investigations are necessary to produce for the general benefit of industry details of schemes in operation, and some indication of their success both in good times and bad.

In advancing the case for incentives for executives, and the principles on which they may be based, it is advisable to be alive to the dangers to be avoided. A financial incentive is not a panacea for all ills, and it is not a substitute for poor management or indifferent supervision. It may act beneficially in prosperous times, but may react unfavourably in periods of depression; it may cause discontent that need never have arisen; it may more easily break up than build up teamwork; it may bring temporary improvements at the cost of permanent set-backs; it may stimulate quantity at the expense of quality, and volume as against thoroughness; and it may create artificial results—by altering the bonus basis or by transferring non-bonus-paying items—which would increase earnings without ensuring commensurate savings.

Even in the case of those companies willing to consider financial incentives for those in supervisory grades, and convinced of their value, there are objections to be overcome. The greatest of these is the difficulty of finding a suitable basis which includes all the factors in foremanship. Another reason for reluctance in adopting financial incentives for executives is the difficulty of withdrawing the scheme if it should prove unsatisfactory in practice. A further objection is the cost and labour involved in investigating, calculating, and controlling the administration of bonuses. Then, too, in some cases, there is the danger of overdriving employees and taking unnecessary risks with personnel and plant for the sake of immediate monetary gain.

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The question ultimately to be decided is how executives can be given that incentive which spurs them on to a continuously higher standard of performance. Both increases in wages and bonus payments are likely to be taken for granted after a short time, unless backed up by personal contact and frequent encouragement. Managerial influence is recognised as being more important than financial incentive, and circumstances must decide how the former can be advanced by the assistance of the latter. A frequent review of departmental results in itself stimulates the interests and energies of the executive responsible for them, but the records often are not produced or reviewed unless an incentive exists that demands that this be done.

The need for varying incentives with changing circumstances is not to be overlooked. In production as in selling much good can come of making periodic drives for first one purpose and then another. In the same way, if the fixed salary has proved ineffective, a limited incentive for a specified period may be useful. When one incentive has been exhausted, another may be introduced.

The distinction between success and failure lies in soundness of application and suitability of introduction. As with payment by results to pieceworkers, the financial incentive for executives follows, and does not precede, the setting up of the proper process, the most suitable working conditions, and the correct system of operation. The financial incentive provides the drive, not the mechanism. Before the incentive is offered as a pecuniary inducement, care should be taken to remove obstacles in the way of improvement. Monetary reward should be offered only after every other non-financial device has been employed to the full. Bonus payment is a reward for lower costs, for improved output, or for better quality. It is, in fact, a payment for additional work done. Its success in application depends on its soundness, on avoiding pitfalls, on providing for eventualities, and on instituting a definite relation between savings and rewards. Its reception will be affected greatly by the competence and sincerity of introduction.

It is premature to refer to a perfect financial incentive for executives. It is, however, clearly a device worthy of careful consideration, and of trial application. Even a moderately sound scheme may in practice be better than none at all. Where regular salaries with periodic increases, together with every other method of stimulating and encouraging executives, have failed to bring

forth and to maintain continuous maximum effort, the financial reward may generate new job-interest mutually beneficial to the company and to the executive. In the same way as piecework has been applied to jobs previously thought unsuitable, so can financial incentives be employed for managers and foremen. If an incentive can make supervisors examine the way they employ their time so that they may direct and use their energy to better advantage, then financial reward for executives justifies very careful consideration. Efficient production always requires maximum effort, particularly from executives, and a monetary reward reflecting appreciation of, and giving encouragement to, individuals in responsible positions, may prove a valuable asset to all concerned —country, company, executive, and operative.

SECTION VIII

BONUSES FOR FOREMEN

In order to indicate current practice in the application of financial incentives for, and in raising the status of, foremen, an investigation was made under the auspices of the Faculty of Commerce of the University of Birmingham and under the direction of Professor P. Sargant Florence. A questionnaire was sent to some one hundred and fifty companies known or thought to have given some attention to foremanship development. Returns were received from over one hundred companies employing more than a third of a million operatives and over five thousand foremen. The questionnaire sought particulars of company policy as to financial incentives for and status of foremen.

In view of the great variety of practice and the unrepresentative sample taken, it was decided against the statistical survey. Where a consensus of opinion might be assessed accurately, figures are given, but generally it has been thought advisable to omit the number of companies subscribing to certain practices as this might be misleading. A large number of factors enter into the final decision for or against bonuses, as well as with conditions of employment. The size and character of the company, the type of product manufactured, tradition in the trade and custom in the locality, and the industrial relationships existing, all have substantial bearing on the scheme selected.

71. Bonuses for Foremen

There is a sharp division of opinion among the companies answering the questionnaire as to whether or not the foreman, as part of the management, should receive a separate bonus, either based on company profits on the one hand, or on departmental performance on the other. Some companies prefer the fixed salary, either including or excluding a small percentage or amount varying with the cost of living index figure. It is argued that foremen are members of the staff, and it is traditional that such grades receive a fixed salary, either weekly or monthly, which covers statutory and stated annual holidays, a limited period of sickness, and occasional leave, as well as reasonable overtime or undertime that may occur. In such cases, it is contended, an incentive is ever-present

in the executive's desire to retain his position, and especially meritorious performance is recognised by a review of basic salary.

In further support it is stated that executives ought not to concentrate on earning bonus or seeking financial reward, but should confine themselves entirely to their executive duties in the broadest sense possible. The best executives, it is contended, think about their jobs first and themselves last. Supervision has so many aspects that it is considered dangerous to emphasise certain factors at the expense of others, or to bring into prominence the personal profit motive. Moreover, with executive work the most important thing is to get the right type of person, who generally does his work well for its own sake and not because of personal gain. Such a man is more likely to be stimulated by non-financial incentives than by those offering monetary reward. It is felt that better results are obtained and a better atmosphere prevails when the foreman is constantly urged forward by close supervision from above, with judicious use of commendation and criticism.

Companies which prefer the fixed wage for foremen, with no additional bonus, do so because they are either satisfied with present performance and existing relationships, or hesitate, sometimes because of insufficient data, to embark on a plan which may cause more discontent than compensating advantages.

The case for the foreman's bonus admits that financial inducement is no substitute either for poor supervision or for bad management, but contends that in business there is no reason why the foreman should not be businesslike. Every effort is made to encourage the foreman to manage his department better. If figures of control and other means are used to indicate improvement, is it not wise that tangible or monetary reward should be given? Whereas it is comparatively easy in the fixed salary arrangement to make an increase for good performance, it is by no means as simple to make reductions for unsatisfactory results or during lean times. The advantage of the variable incentive is that it accommodates both good and poor performance. It tends to make exact and impartial the management's appreciation of departmental supervision.

Where foremen are paid an additional amount periodically apart from fixed salary and distinct from cost of living allowances, the amount is determined either by the group sharing of a common pool or by individual performance. As the whole aim and purpose

of these two methods is sharply divided, they will be treated separately.

72. Group Sharing

A. Sharing Profit

A number of companies reported the practice of sharing part of the annual profits among those who contribute to them. The various schemes fall into two classes: those where all employees share, and those where selected staff share.

Profit sharing for all employees, either with or without copartnership, was pioneered in 1889 by The South Metropolitan Gas Company after having in force a plan for executives and foremen only since 1886. In 1920, the company obtained a special Act of Parliament authorising the sale of gas on the basis of its heat value, so that when the price fell below standard a three-fourths share went to the benefit of consumers and the remaining fourth was divided equally between shareholders and employees. After a minimum service of one year, all employees shared in the allocated profit on the basis of salary and wages.

It is not proposed to pursue the problem of profit sharing in general, which has been dealt with adequately in the Ministry of Labour Report on Profit Sharing and Labour Co-partnership in the United Kingdom, Cmd. 544, 1920. However, in passing, attention might be drawn to the special trading circumstances of utility concerns where there exists (i) a local monopoly; (ii) a great and assured demand; (iii) the strict regulation of dividends payable under the sliding scale system; and (iv) a power to punish by fine or imprisonment (Conspiracy and Protection of Property Act, 1875) employees breaking a contract of service. Further, any scheme for participation in profits not fixed on a pre-arranged basis and not applying to the majority of employees is not regarded as profit sharing in the established sense.

Sharing profits with employees has been adopted by a number of companies answering the inquiry other than those including co-partnership in their schemes. For instance, one large motor car manufacturing company allocates 10 per cent of the company's net profits for distribution after providing 7 per cent interest on capital, income tax, and other charges. The fund is distributed pro rata to the annual earnings of every individual employed in the company

with 12 months' service or over, with the proviso that long service receives $2\frac{1}{2}$ per cent for every year in excess of five years, with a maximum of 25 per cent addition to the remuneration base. This bonus is paid annually in cash one month after the publication of the final accounts, and for a typical year was 5 per cent of earnings. The purpose of the scheme is to foster improved relations between management and operatives, and to stimulate a common interest in waste reduction and maximum output.

In 1941, the directors of an engineering company answering the questionnaire instituted a profit sharing scheme for certain employees including staff grades 1, 2 and 3, and certain other employees. They set down the following principle:

"There shall be divided among certain employees of this company, in weighted proportion to their earnings, in the Account Period, a fund consisting of one half of the profits over a certain amount called the Datum Line."

Participants in this scheme are required to be over 21 years, comply as to category stipulated, and be employed for the full account period. The net profits, which are divided for distribution, are calculated after excluding any part above the E.P.T. standard and after deducting the datum line and income tax. The datum line is a fixed amount and not a set percentage or any other method allowing for expansion, but with provision to increase the datum line with any change in the issued and paid up capital of the company. The distribution of the fund is weighted by categories where earnings of staff grades I and 2 are multiplied by 4, staff grade 3 by 3, staff grade 4 and other works employees by 2. To avoid the distribution exceeding what is intended, a limit of 20 per cent above earnings is imposed, the surplus for one year being carried forward to another at the discretion of the directors. Distribution is made annually at the same time as interest is paid on shares. The purpose of the scheme is stated specifically as to raise the standard of industrial relations.

Another company, where piece work is not a common feature of the process, distributes a proportion of profits to all executives, including foremen. The basic amounts are apportioned by the higher management according to position, service, and salary. Individual incentive is provided by the periodic review of basic

proportions. The company emphasises the advantage of varying the individual's share of the profit fund according to the merit rating of the management as being more satisfactory than an impartial distribution on earnings or some other basis. The bonus, paid annually in cash, varies from 10 per cent to 25 per cent of basic salary.

Some companies reporting their practice have preferred the combination of a number of schemes, so that particulars are given of a typical arrangement employed by a large engineering firm. This concern, consisting of a group of companies, has a profit sharing scheme under which all employees receive an annual bonus, the amount of which depends on the profits of the particular company in which they are employed, as well as the general prosperity of the group of companies. This bonus is in proportion to the annual earnings of the individual, with a service increment. Foremen share in this plan exactly as all other staff members and operatives. In addition, foremen receive a monthly production bonus shared proportionately to salaries and based on the excess of actual deliveries over budget for the main production (electrical motors). Certain other members of staff, including shop superintendents, production planning, and progress personnel, are similarly rewarded. This latter bonus is paid in cash about the middle of the month following the period in which it has been earned and amounts to about 10 per cent of wages of foremen, which would otherwise compare unfavourably with the highly paid skilled workers under their supervision. The scheme is admittedly one to increase emoluments rather than to provide a production incentive. In any case, the foremen's bonus arrangements is limited to the duration of the war.

B. Sharing Works Profit

Some companies reported having favoured net profit as a basis of bonuses for foremen, because it linked up the fortunes of the executives with the company's capacity to meet its extra obligations, so that staff benefit or suffer with the rise or fall of prosperity. Other companies regard net profits as determined by many factors outside the control of foremen and other executives, and influenced largely by social and economic conditions of demand, and the higher policy of direction. Manufacturing and selling policies greatly affect profits and the foreman has no part in their determina-

tion and should not be asked to incur financial risks he is unlikely to understand and even less likely to influence.

In order to avoid these obvious objections and still maintain group sharing, with its aim of executive teamwork, some companies have discarded net profits as a measure of factory efficiency. They have also sought to avoid cash turnover, based as it is on current market prices, and have substituted in its place work turnout determined on estimated cost of production. Such schemes might be regarded as Sharing Works Profit or Group Sharing of Improved Works Costs.

W. F. Walker, in Machine Shop July 1943, describes a method employed in a medium sized engineering concern. The estimated or standard works cost is determined by a review of previous weekly or monthly performances. The works cost concerns direct and indirect materials used and bought out parts, direct and indirect labour and oncosts. A predetermined proportion of any saving effected between actual achievements and the set standard is divided equally or proportionately between the foremen participating. This is a simple and straightforward arrangement suitable for factories with fairly regular products and a reasonably consistent output. The scheme would not be suitable where substantial expansion was contemplated, where batch sizes varied considerably, where new products were constantly being met, or where obvious departmental improvements were not carried out beforehand. Variations in the cost of raw materials or bought out parts would no doubt be adjusted in the standard performance, but other variations could only be dealt with by time and material estimates determined by a ratefixer. If the variable part of the works production is small, the arrangement might be acceptable, but where a ratefixing department exists as a standard practice a more detailed budget calculation is preferred.

C. Group Production Bonuses

A number of companies reported they were in favour of an incentive reward of foremen, assistant foremen and forewomen on some suitable unit measure of production. Taking previous performance as a datum line, bonus is paid on factory output in excess of this minimum. One large electrical company has for twenty years paid in cash as a bonus a percentage per 100 tons produc-

tion above minimum shared in proportion to the participants' actual earnings monthly.

The first chief objection to bonuses based on factory production lies in the difficulty of finding a common expression of output, whether by weight or by units, which fairly expresses the amount of work and overcomes large variations between different kinds of jobs produced. The second objection to this simple computation of bonus is that the measure of production does not take into account additional labour, new machines, improved equipment, and general expansion, which raise output apart from the effort of the participants. Then too, a reduction or substitution of staff due to war conditions would reduce production, while at the same time adding to the burden of supervision.

One company, where production for bonus purposes is based on the number of aeroplane engines completed, admits that because of the many varying factors the basis is unsatisfactory, but in spite of its being "hit and miss", accepts the method as a temporary expedient because of the urgent need for some bonus and the difficulty of finding quickly a more suitable alternative.

Another large company building aircraft also pays a bonus to foremen based on machines completed. The fund for distribution, in this case, is built up by allowing a different amount for the various types of aircraft produced, and in addition extra amounts are paid for each machine produced in each class in the given period. For the first, $\mathcal{L}x$ is allowed; for the second, $\mathcal{L}x + a$; for the third, $\mathcal{L}x + 2a$, and so on. The fund is paid monthly in cash, is divided equally among the participating foremen, and amounts to the exceptionally high figure of 60 per cent of basic salary. General foremen and works managers are paid a bonus based on the amount paid to departmental foremen.

One large manufacturing company producing a standardised product has set up cost standards for labour and materials (direct and indirect). Output is computed at standard prices, and for each £100 saving effected against standard there is paid a percentage bonus on the participating foremen's salary, with a maximum of 30 per cent.

Although some of the objections to bonuses paid on factory production have been met by the schemes described for taking into account all the expenses of labour, materials, and overheads in computations of factory costs, a number of companies have sought

to pay group savings to men based on labour efficiency, either with or without special incentives for savings in materials.

D. Group Labour Efficiency Bonuses

Although labour efficiency bonuses normally apply to schemes for the individual reward of foremen, it sometimes happens, where departments are closely inter-related and where the results of one materially affect the possibilities of another, that group sharing is introduced either to embrace all departments or to deal with those concerned and exist side by side with other departmental foremen paid individually.

One company reporting such an arrangement advised that the direct unit hour of the department is ascertained by totalling all the effective work units, and dividing by the total operation hours. The resulting figure, which takes into account lost time, provides an index of the departments' efficiency over the whole week. A sliding scale of premium then determines the bonus available for distribution. The sharing of the group bonus can be determined according to the size of the department supervised, by the number of hours worked by the foreman, by a combination of both, or on some arbitrary basis. Deductions are sometimes made for excessive machine standing time, or for excessive waste of materials, or for both.

E. Summary

There are two views on profit sharing: one regards profits as the result of employee effort and should be shared; the other considers that profits are the reward of the investing public and of no concern to the employee. The one considers employees as a participating interest; the other prefers to engage labour as an element of production with "marketable price". Both seek the maximum efficiency from employees, but one makes a general contract and the other makes terms individually. Both want to provide the best incentive to individual effort; but whereas one considers the most effective spur occurs in the communal effort, the other exploits the competitive spirit. The question is this: which incentive provides the best bait for unrestricted effort in the wider interest of the company in the long run? Does the concern gain more from co-operation and contentment than from competition and striving? Should the firm underestimate personal differences of productive capacity or over-emphasise them? Do circumstances

demand greater attention to length of service and accumulated experience or to the immediate results of personal achievement? Whereas the one is more favourable to older and more stable staff, the other is more acceptable to younger go-ahead executives.

The issues raised appear to be: What is the secret of executive efficiency and supervisory encouragement? Are better results obtained by regarding foremen as pieceworkers or by emphasising the stability of staff conditions? Which is the more important issue? Can either be improved by modifying the other?

Profit sharing for the managerial staff or for the supervisory force must not be hastily adopted or quickly condemned. In particular, any preconceived notions based on profit sharing, and co-partnership for all employees must be re-examined in view of the limited application. The general application of profit sharing to all employees in a large company cannot be expected to achieve the same degree of teamwork as when it is restricted to a selected group of senior and junior executives intimately and collectively responsible for results.

Profit sharing might be said to overcome interdepartmental friction between foremen, especially when its effect on bonus earnings is consistently emphasised. It tends also to economy in labour by encouraging interdepartmental transfers of staff. The chief disadvantage of profit sharing is that profits are not closely related to supervisory efforts.

While retaining the tendency toward teamwork and overcoming the objection to profits as a basis, other forms of group sharing are often adopted. However, it is frequently contended that better results are obtained from intense individual competition than from foremen working and sharing in a group. The tendency is to reward the foreman for effort, not to distribute a share in company prosperity. For this reason, group output is usually expressed in terms which are not dependent on variations of prices, either of raw materials or the finished product, over which the participant has little influence.

As with any other method of payment, the basis, computation, and distribution of a group sharing scheme should be accurately ascertained before introduction. If, however, unforeseen circumstances provide unpredictable variations, the result is likely to be less serious with group sharing than with individual reward. The amount earned by each participant should be sufficient to induce

striving; inequality of distribution should be avoided; payments should be frequent; scope for rewarding individual merit should be defined; and, while maintaining good faith, provision for review and revision should be acknowledged.

73. Individual Reward

A. Departmental Bonus

Many companies, while admitting that foremen can contribute materially to profits, contend that the final surplus is determined more by decisions of the directors on major issues of policy than by departmental performance. Price fixing is one of the most important factors in profits, and this implies decisions on selling policies. It also involves questions as to which products are to be manufactured and which discontinued. Then, in turn, responsibility for the selection of plant and senior personnel rests with the board of directors. Further, in all these decisions there is an element of risk which the directors are entitled to accept but which the foremen are not expected to share.

Whereas profit sharing schemes tend to create a common interest between directors, managers, and foremen, who for better or for worse are rewarded from the final result, individual bonuses tend to confine the foreman to matters alone concerning his department. The supervisor is in fact regarded as a pieceworker where his output is departmental production.

Individual reward has its advantages in simplifying the issues for the foreman. If, by ingenuity, intelligence, and energy, he can improve performance, he receives the whole reward and neither has to share it with others nor to see it frittered away by poor performance elsewhere. Individual reward is undoubtedly the greatest spur to personal effort.

The disadvantages of departmental bonuses lie in the difficulty of finding a suitable basis for computation which, while representing individual effort, does not at the same time injure wider company interests. Another objection sometimes raised, especially when labour is in short supply, is the time and cost of computing results and compiling records that serve little purpose other than for the payment of supervisory bonuses.

The schemes which have been reported vary from the crude to the refined, and from the simple to the complex. They are, however, in line with the general manner of control. Where labour

cost has been carefully measured, it is usual to find supervisory bonuses equally well computed. In drawing up schemes, the tendency is to concentrate on the most important items of cost that can be influenced by the foreman and to confine the calculation to those items where accurate records already exist or can be easily obtained.

B. Arbitrary Distribution

When reviewing the foremen's salary and status as compared with that enjoyed by operatives, some of the companies reporting found themselves faced with the problem of desiring to improve employment conditions for supervisory ranks without incurring a permanent increase in the cost of production. The high rate of wages earned to-day by certain operatives, which is causing such general discontent especially among staff and supervisory ranks, are grossly inflated due to unforeseen war conditions, and are essentially temporary in character. Companies may dispose of this problem either by making an arbitrary distribution on some rough-and-ready basis and limited to the duration of the war only, or by proceeding to explore and establish a systematic scheme for the bonus payment of supervisors on some sound basis subject to revision after the war only if unforeseen circumstances arise.

Arbitrary distribution has taken the form of a fixed increase in salary; a specified addendum to meet the higher cost of living; a predetermined war bonus; or a variable distribution determined by the directors or higher management and based on profits, production, or general circumstances.

A large company manufacturing miscellaneous electrical equipment ranging from short-cycle operations to complete turbogenerators, reports that it has not been found possible, owing to the diversity of products, to devise an equitable system based on accurate measurement and applicable in principle to all departments. To overcome the interim period and yet to gain the advantages of a bonus payment, a half-yearly distribution is made arbitrarily based on the senior executive's assessment of individual capacity in the grades concerned. Four factors are taken into account:

- (a) Length of service;
- (b) Experience;
- (c) Effort applied;
 - (d) Results of the department.

The amount allocated for distribution varies with the general results of the company in the preceding period, but has in the past two years ranged from 15 per cent to 25 per cent of salary.

The method of arbitrary distribution has been forced on many companies by the sudden and substantial increase of wages paid to operatives. This state of affairs was expressed, by one of the companies reporting, as follows:

"One of the difficulties with which, in common with many factories, we have been faced, is that with the high level of piecework earnings which a workman is able to obtain under war-time conditions, a foreman consequently receives less money than the men working under him."

Realising that in many cases the wages of operatives have been inflated due to exceptional conditions, companies have preferred to maintain the customary distinction of earnings for foremen, but at the same time, to retain fluidity. In this way, it is hoped to avoid friction and discontent arising when, after the war, the wages of operatives return to normal, and with them, the salaries of supervisors.

An engineering company which for many years had paid individual incentive bonuses to foremen found that, under present conditions, the amount earned is inadequate compared with the wages of operatives, and in consequence, as a war-time measure, pays a lieu rate of 20 per cent of the basic salary. No special results can be traced to this additional payment except, perhaps, a greater degree of contentment. However, the lieu rate was introduced at the same time as piecework for operatives and from which beneficial results have been obtained. It is considered that the results would not have been so good had the foremen not received additional compensation.

A well-known shoe manufacturing company has also adopted the method of arbitrary bonus distribution to foremen, but has made it clear that the amount, which varies from 14 per cent to 20 per cent of basic salary, is paid by the directors from profits, and includes a large allowance for increased cost of living and the longer hours being worked. This company stresses its normal policy which favours for reasons of security and certainty a high standing salary and relatively low bonus earnings, in preference to the lower salary and high bonus.

C. Increased Output

To be constructed satisfactorily, all bonus schemes require a certain degree of stability. Where the machinery, space or labour are reasonably restricted from extension, it has been found possible to stipulate a datum line, and according to a set scale to compute bonus above the fixed minimum. Such an arrangement is a fairly simple affair, and output can be expressed in pieces, weight, or cash value. It fails, however, when additional plant or labour is introduced. In order to overcome this weakness, and yet retain utmost simplicity, the foreman is paid a bonus equal in percentage to that earned above basic rates by his operatives. One company operating this scheme paid bonus monthly in cash and it ranged between 20 per cent and 30 per cent above salary.

An obvious objection to this plan based on the earnings of piece-workers, and consequently on direct workers only, is the tendency to raise wages by the increased use of indirect labourers to fetch and carry, and in some cases to undertake part of the work already included in existing piece rates. Further, it presumes that the piece rates have been set accurately and that the foreman's salary does not already take into account part of the normal increase over standard wages expected from pieceworkers.

The object of a bonus to increase output, whether based on quantity produced or pieceworkers' earnings, has the merit of being simple to operate and easy to understand. However, its use is limited because, unless otherwise controlled, it is possible to advance output by increasing the cost of indirect labour, materials, equipment, and plant, and by lowering the quality of workmanship.

D. Labour Efficiency

In recent years there has been a steady growth in the number of companies adopting the method of measuring labour efficiency and expressing it in relation to a standard unit hour. Although some have confined themselves to the measurement of direct labour, primarily with a view to the setting of piece rates, others have extended the method to include indirect labour and the computation of departmental effectiveness. Standard performance is regarded as equivalent to set salary, so that any improvement is rewarded in bonus either as a similar percentage above salary or according to a prepared scale.

It is naturally a great advantage to relate the foreman's bonus to

an accurately measured and known factor of production, for it gives confidence that results so assessed cannot be manipulated easily or influenced purely for bonus purposes. Some plans reported to us arrange for the foreman to participate in the reward for improved departmental performance by taking a share of the operatives' extra earnings, while other plans prefer to remunerate the supervisor separately, although based on the results for which he is responsible.

For reasons stated above, those companies with a measured labour performance prefer to include both direct and indirect labour costs, so as to prevent direct labour being influenced (without advancing the company's interests) by an adjustment of indirect labour.

The method of labour control based on the precise measurement of performance usually enables output to be expressed daily in work units, which, when divided by the actual number of hours worked, give a departmental efficiency index. Results are frequently expressed in relation to the standard of 60 units per hour. Thus, while results of a 70-unit hour or a 75-unit hour are common, an 80-unit hour is regarded in usual circumstances as an optimum, although higher figures are occasionally obtained. In this way, a 75-unit hour represents 25 per cent and an 80-unit hour is equivalent to $33\frac{1}{3}$ per cent above standard.

Where the size of the department is fairly constant, a bonus scale can be devised for each case, but where uniformity of plan is required, it is common practice to multiply the departmental unit hour achieved by the number of hours worked by those concerned. In this way the varying sizes of departments are taken into account, for bonus is then computed on the total effective minutes.

While some companies report paying in bonus the same percentage of salary as that secured over standard performance, the usual practice is to devise a scale giving much lower rewards. For instance, an 80-unit hour would provide 33\frac{1}{3} per cent increase on salary and this is considered excessive.

Results usually computed daily are generally compiled into weekly figures for bonus purposes. Some companies pay weekly on weekly results; others pay weekly on a four-weekly average; and others pay monthly on monthly results.

Foremen's bonus based on labour efficiency serves admirably in many departments, but it is often necessary to provide for adjustments and allowances. The tendency to forgo quality for quan-

tity, which is common with all methods of payment by results, is overcome with the foreman's bonus by making deductions according to a prepared scale for scrap and rejections exceeding a fixed maximum.

The working of the labour efficiency bonus is described by one company for the commonplace work of loading and unloading stores: "In this case there are many teams loading different sorts of metal in different ways, e.g. inwards or outwards, to rail truck or to lorry, etc. Each of these teams works on a standard basis. Each job has been studied in detail and a certain minimum number of plates per man per hour has been computed. Anything in excess of this number of plates per hour produces a bonus for the workman. He in fact works at a rate above the standard and gets bonus accordingly, but if there are stoppages due to non-arrival of trucks or insufficient metal to load, or whatever the reason may be, these men book waiting time and therefore their bonus is not affected. They receive bonus for perhaps six hours' work in the day, and ordinary time for two hours' compulsory idling.

"The foreman is paid on the average working rate of the group in his plant. Waiting time, which is excluded for the operative, is included in the foreman's bonus so that the smaller the waiting time the higher the earnings.

"It will be seen that this method results in the foreman having an incentive of the same type as his men to see that materials flow in and out of his store with as little hitch as possible, and also an incentive for seeing that he has no idle labour, by using such opportunities for moving metal in the store, or by forecasting ahead so that men are transferred from the store with the result that those remaining are working substantially full time.

"One other difference is that bonus is computed daily for the workman and weekly for the foreman."

The purpose of this foreman's bonus is to reward the supervisor on the same basis as the operative so that they are mutually interested in maximum output, with the proviso that the foreman suffers where excessive waiting time occurs. Care must obviously be taken to avoid output being artificially raised by allowances at the discretion of the foreman.

E. Computed Budget

The schemes falling into the classifications described above have

the advantage of simplicity, and with varying degrees of accuracy, relate usually to labour. Direct and indirect materials cost is taken into account, if at all, as a comparatively minor adjustment. Other overhead expenses such as maintenance, steam, power, and lighting services, and so forth, are excluded. The purpose of the third group of schemes reported to us is to take into account factors in addition to direct and indirect labour and, in this way, to impress upon the foreman his full responsibility for entire departmental costs.

One company, where departmental budgets have been an established feature of control for some time, during the past two years have operated a scheme which produces a yearly bonus to foremen based on $\frac{1}{4}$ per cent of the year's earnings for each 1 per cent saving on defective workmanship (material and labour) as compared with the corresponding standard-at-actual or budget expense for the year, but not exceeding 25 per cent of the actual amount saved. Additionally, 5 per cent on yearly salary is paid when actual production volume of the department equals or exceeds the budgeted production volume for the year. No bonus is paid when the actual production volume falls to 75 per cent of the budgeted volume, or under. Between these limits, bonuses are paid pro rata.

Another large concern pays bonus on the attainment of a target, and includes cost, manufacturing time, avoidance of scrap (even though it can be utilised), avoidance of waste material, and accuracy of working to process. Results are calculated annually but paid to foremen monthly, and approximate to an average of 15 per cent above standard salary. This company is employed on the manufacture of rubber tyres, where the conservation of material is essential, especially at the present time.

One company, which, because of the technical nature of its product, has for some years abandoned the appointment of foremen by up-grading operatives and substituted departmental managers with university training, has devised a detailed plan of budgets. By an accurate assessment of wages, maintenance, steam and power costs, as well as loss and depreciation of materials, an ideal budget is set up and bonus is paid according to the degree of its attainment. Although material is a substantial element of cost, the influence of fluctuating prices is neutralised by taking into account only losses and depreciation in process. Departmental managers are provided with all the detail figures (wages daily, steam weekly, materials

monthly) necessary for the control of cost. It is appreciated that certain factors beyond the control of the supervisor influence results, so that the final bonus is based on 75 per cent allocation for measured performance and 25 per cent for personal rating to cover certain intangible factors. Where the measured performance falls under 70 per cent no bonus is paid, but above this minimum a strict arithmetical scale applies to produce 25 per cent of salary as bonus for ideal performance. Bonus is paid half-yearly, and ranges from 5 per cent to 10 per cent of salary. Personal incentive is maintained by a regular meeting of superintendents to analyse costs and examine results.

F. Multiple Schemes

As an alternative to one scheme incorporating numerous factors, some companies have preferred to establish separate schemes so that the reward under each is made known and sometimes paid separately. The advantage of this arrangement is that it avoids the otherwise more complicated calculation and gives relative emphasis to the most important factors in production as they concern a particular department.

An instance of two schemes working separately is provided by a company where one plan pays a weekly bonus of $\mathcal{L}I$ for a departmental unit hour of 85 or more, with no bonus for a performance of a 60-unit hour or less; and the other pays a weekly bonus of $\mathcal{L}I$ for no lost time or breakdown time, with no bonus for 2 per cent or more lost time. Both scales operate arithmetically. Bonus is calculated daily, paid weekly, and when combined averages 20 per cent of salary. Here again, there is an established procedure for a day-to-day check on production effort and for a weekly examination of results with the works manager.

A second company operates three schemes for separately rewarding foremen. The first pays bonus quarterly on savings in labour costs compared with estimated or budgeted costs calculated weekly. The second remunerates quarterly also according to the percentage labour cost on completed jobs compared with estimated percentage expenses. The third rewards performance and quality by a monthly payment. The total bonus paid approximates to about 50 per cent of basic salary. The first scheme was put into operation 20 years ago, and the second and third superimposed 5 years and 1 year ago respectively.

An example of multiple bonuses is to be seen in a company which rewards foremen weekly according to departmental effectiveness derived by a point plan computation, and this commonly amounts to 20s. to 25s. weekly. In addition, each foreman receives weekly a cost of living addendum which at the present time provides £39 per annum. Then, half-yearly, three-quarters of the weekly wage is paid to each foreman, and finally, at Christmas, a selected number of foremen (about 25 per cent) receive a merit bonus.

G. Summary

Apart from the genuine difficulties of finding a reliable and measurable basis for productive effort, there has always existed a prejudice, now happily of a diminishing degree, against the introduction of payment by results. However, piece work is a standard practice for most operatives engaged on repetition processes, and for many who are not, but it has not been applied as yet to the same extent with indirect and staff workers.

There are two chief objections to raising the salary of supervisory ranks. The first is the desire not to increase permanently the unit costs of production by an irreducible overhead. It is far easier to raise salaries than to lower them, so much so that the disadvantages of the latter may far outweigh the merits of the former. The second objection is the difficulty of discovering, and the expense of operating, a suitable scheme. Again, it is far easier to introduce a plan of payment than to withdraw it.

Other objections to financial incentives may be cited:

- (a) Unforeseen circumstances may tend to inflate greatly or to reduce severely the bonus intended, a reduction having adverse effects;
- (b) Supervisors may become too intent on bonus earning factors, with the consequent neglect of other equally important items;
- (c) Foremen may be encouraged to seek means of artificially raising their bonus earnings;
- (d) There is a tendency to rush certain jobs into a bonus period at the expense of other priorities.

A review of the many schemes for individual reward of foremen shows a decided tendency to establish, first, an accurate measurement

of departmental effectiveness, and secondly, to sharpen the foremen's interest by introducing a financial incentive. Thus, although the foreman benefits most when operatives earn high wages, he is, by rigid control of direct and indirect labour expenses, prevented from artificially raising wages without increasing total efficiency. By the proper time-setting of operations he is safeguarded against loss of bonus earnings or false reward for high or low output due to factors outside his control. Most of the companies reviewed provide their foremen with detailed figures to facilitate control and reduce costs. These obviously have greater significance and are likely to be better used if improvements are justly and automatically rewarded.

The control of labour cost naturally plays an important part in the supervision of most departments, but in some more than in others. Such factors as process materials, maintenance of plant, steam and power services, and other overhead expenses, may be greatly influential in the final cost, so much so that they must be taken into account or rewarded separately in the bonus computation. If the foreman is to be regarded as a pieceworker of a particular kind, it is necessary to safeguard the company's interests to prevent a decline in the quality of workmanship or an increase in the degree of scrap. The foreman should not be provided with any incentive to advance merely for personal gain one factor of production at an even greater expense in other factors not separately controlled.

Many companies have expressed their satisfaction with the operation of their schemes for supervisory bonus payments, but it is not possible either for them to assess, or from the information provided to determine, the degree to which financial incentives, whether group or individual, have repaid the amounts expended. Some concerns have admittedly introduced schemes to meet special war conditions and to last for their duration, but many more have, commencing pre-war, a more permanent and established policy.

SECTION IX

THE STATUS OF FOREMEN

74. The Foreman's Standing

The foreman's standing in industry may be examined from two viewpoints: as the method for securing maximum supervisory effectiveness; and as the means for inducing suitable applicants for vacancies.

Supervisory effectiveness, apart from ability, depends on the willingness of the foreman to apply himself, and on the facilities for application provided by the management.

It is realised to-day that a discontented man cannot do his best work. When that man is an executive with influence over others, he not only limits his own effort but restricts that of many others. Generally, the foreman regards himself as the Cinderella of industry. With some apprehension, and not without some justification, he sees everything being done to raise the wages and improve the working conditions of operatives, while his own position is overlooked. He views with concern the ever-shrinking margin of income between himself and his subordinates, and his position is made more irksome by his ever-increasing responsibilities. He gets all the kicks and none of the ha'pence.

Whereas the operative has a trade union to negotiate higher wages and better conditions which are enforced through signed agreements, the foreman is left to fight his own battles, or more often to wait for his employer without prompting to recognise his services. Both in this country and in the United States of America, the Association of Supervisory Staffs and Engineering Technicians and the Foremen's Association of America have sought to enlist as members supervisory staff and to negotiate on their behalf. Although both trade unions have made relatively rapid progress in recent years, the representation as yet is almost negligible. However, foremen realise that collective bargaining has borne fruit, and in some cases to the extent that operatives would appear to receive every possible consideration.

Much of the present dissatisfaction among foremen has occurred because the wages of certain piecework operatives due to war conditions have risen to phenomenal levels and cannot easily be

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rectified. Neither is the foreman's discontent due to what operatives are earning in other industries, but too often to the wages of manual workers in his own department or one in the same factory.

Working conditions in many factories have also improved greatly without commensurate adjustments for supervisory staffs. Scarcity of labour has brought about many improvements as to the guarantee of the working week, and the Essential Work Orders have enforced guarantees of wages. Thus the advantage of a regular fixed salary, usually enjoyed by supervisory staffs, is now also shared by those of operative level.

The many improvements in the wages and working conditions of operatives have had the unfortunate effect of interfering with the foreman's willingness to apply himself to the fullest extent. These improvements have at the same time contributed to the growing independence of operatives and the rising power of organised labour. Supervision in the workshop is made more difficult by the general relaxation of discipline—again due to shortage of labour and to war conditions. Thus, at a time when there is a need greater than ever before to assert a guiding influence over employees in industry, those in a position best able to implement a beneficial control feel disappointed and discontented. They lack the drive necessary for the new kind of leadership demanded by the circumstances.

The foreman's standing must be reviewed primarily for those already established in positions of authority; but it is necessary also to consider the aspect of enlisting new personnel for appointment to supervisory rank.

It has already been established that the present standards of supervision are inadequate. Although future needs may be met by training those with possibilities of improvement, others found unsuitable must be replaced. It is not always satisfactory to promote to positions of authority those of operative rank, even after some intensive training. The general trend of opinion is in favour of enlisting from outside those with a better general educational background than is usually found among operatives.

If an industrial concern is to attract better educated trainees to the supervisory force, conditions of employment must be at least comparable with alternative appointments in commerce and elsewhere. Compared with other staff positions, departmental super-

vision usually requires a longer working week, less personal comforts, and fewer privileges.

The status of foremen must be reviewed, therefore, so as to give a new significance to supervision in the workshop; to provide increased satisfaction to those trained for their greater responsibilities; and to ensure a wider range of recruits of a higher educational background than those usually appointed to foremanship.

The most important thing is to create effective supervision through harmonious teamwork in the executive and co-operation in the workshop. Before operatives can be efficient and happy, the foreman must be the leading example. The issue, therefore, is whether these aims of a more cohesive and coherent executive consisting of management and foremen, together with better results in the workshop, can be advanced by financial incentives, or by improved status, or by a combination of both.

75. Status

The inquiry made by the author under the auspices of the University of Birmingham, and described in the preceding section, revealed that most companies either had recognised or were in the process of reviewing the importance of the foreman's position in industry. It is now being more widely accepted than hitherto that it is not so much what the directors decide or the managers decree, but what the foreman says and does which is paramount with operatives. The foreman represents the company to the workpeople. He is responsible for interpreting and implementing day-to-day instructions.

The incidence of war conditions has thrown immense responsibilities on the foreman. Changes from peace-time products to war-time production have involved many problems in machinery, materials, and methods. Extension of departments and lengthening working hours, together with the loss of skilled operatives and the gain of inexperienced workers on a scale hitherto unknown, has produced new problems. The imperative need for maximum production has been coupled with the insistent demand for flexibility. Underlying these fundamental issues has been the growing independence of labour. A more enlightened discipline has appeared, and with it, the need for more adaptable supervision.

Morale is an important factor in the workshop. It reflects the

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degree of contentment and grade of supervision existing there. It demands a prevailing sense of security and a large element of certainty. For this reason, apart from the need for retaining accumulated experience, the supervisory force should remain substantially consistent. Continuous changes of staff are likely to be more harmful than helpful. It is thus necessary to retain satisfactory and satisfied foremen, and in this, salary and status are vital factors.

The trend of managerial technique demands more highly educated and better qualified technicians than hitherto. If industry is to attract to its junior executive ranks suitable types with good qualifications, it must offer inducements in salary and status commensurate with alternative kinds of employment available. Then, too, apart from enlistment from outside sources, promising employees of operative rank should see in supervisory positions an achievement worth working and waiting for.

The great difficulty of enlisting well-educated youths and promoting experienced operatives to the rank of departmental foreman suggests that the remuneration and conditions, considering the responsibilities involved, are not sufficiently attractive. Nor is it possible by sudden improvements to rectify the position immediately. Where foremanship has been neglected so long that it is commonly regarded as an unfortunate accident rather than an undisputed achievement, this prejudice dies hard. In consequence there are few men available who are prepared to be promoted, and even less who are willing to be trained for supervision.

The imperative need for action is due, apart from many years of neglect, to the advancing wages and working conditions of operatives. So rapidly has the position of unskilled workers risen in war years due to scarcity of supply that it is not uncommon to find foremen in circumstances little above, and not infrequently lower than, their subordinates engaged on piecework jobs. The foreman sees his operatives gaining from increased wages, guaranteed incomes, payments for statutory holidays, payments for annual holidays, sickness and benevolent facilities, and in some cases pensions and family allowances, on a scale which gives him little advantage. Thus, with his growing responsibilities and the need constantly to acquire new techniques, with little extra compensation, the foreman finds, in comparison with the operative, a continuously diminishing margin. Consequently, there is an

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underlying discontent, which cannot help but reflect itself on production.

Some companies have tackled their supervisory problem by introducing bonuses; some have preferred to raise status; and others have decided in favour of both.

Income is of primary importance. Whether it consists of a fixed salary or a guaranteed minimum with a bonus incentive, wages cannot be substituted by, but only supplemented with, subsidiary working conditions.

76. Salary

There is a sharp divergence of opinion in industry on the question of executive salaries. Answers to the questionnaire, when analysed, produced the following distinctions:

- (a) Foremen should be highly qualified as technicians and executives, and, ranking as department managers, should receive a high standing salary commensurate with their qualifications, experience and responsibility;
- (b) Foremen should be capable of earning a high salary, but this should be dependent on either individual or collective performance. They should have an incentive, like pieceworkers, with high pay for worthy efforts in good times, and risk lower earnings for moderate results in poor periods;
- (c) Foremen should be paid a moderate standing salary and not be dependent on a fluctuating income due to bonus, but should receive generous staff conditions;
- (d) Foremen, being a grade next above operatives, should receive slightly better wages and conditions.

Although it would have been interesting and possibly instructive to analyse the wages paid to foremen compared with those earned by operatives, it is clear from the outset that the wide range of variables renders the results doubtful. The foremanship function in industry varies in the following ways:

- (a) The degree of technical knowledge, qualifications and skill required, and the length of training necessary;
- (b) The extent of executive ability and adaptability;

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- (c) The number of operatives controlled and their average wages;
- (d) The area under supervision;
- (e) The character and nature of senior management;
- (f) The kind of processes supervised and the type of machinery used;
- (g) The age and service of the foreman.

Thus, while one foreman, highly qualified technically, is responsible for a large department with a wide variety of processes, another with the same designation in a different company may neither have nor require any special trade knowledge, and merely supervise a small number of operatives on repetition work.

The character of the process, and custom in the trade play a large part in determining the wages paid to foremen, which range for men from £250 to £550 per annum, and for women from £175 to £300, but individual circumstances and company policy are also influential factors. Another guiding principle commonly accepted is that the salary of supervisors should range from 25 per cent to 50 per cent above the average earnings of operatives in the department.

It is admitted, however, that while wages must be sufficient to enable the foreman to maintain a corresponding social status, the amount of money paid to persons in supervisory grades is not everything. As with operatives, the wage packet is a basic requirement, but immediate contentment and ultimate efficiency depend even more on conditions of employment, and this is especially so for executives.

In view of the current trends of employees' attitude, with its great independence and liberty, it is now thought necessary, by varying means, to raise the personal prestige and consequently the individual influence of the foreman.

77. Grading

In smaller companies with a straightforward organisation status grading is simple, but in larger concerns it is necessary to distinguish rank in the supervisory force. A wide choice of terms is available, such as leading hand, senior chargehand, overseer, supervisor, assistant foreman, foreman, general foreman, assistant department manager, department manager, and superintendent. Some com-

panies use the simplified form of grade "A", "B" and "C" foremen.

By creating a number of grades it is possible to establish both seniority and promotional possibilities. When each grade is fully recognised and supported by corresponding conditions, the scope of authority and degree of responsibility implied is easily appreciable by subordinates, colleagues, and superiors.

It is customary, according to the number of employees controlled, to distinguish each grade by manner of payment, holidays allowed, benevolent privileges, canteen and cloakroom facilities, and Works Associations. For instance, a simple grading might be as follows:

Grade	Employees Controlled	Payment	Paid Holidays
Chargehand	10-50	Hourly	Statutory
	50-100	Weekly	Week
	100-200	Weekly	10 days
	150-300	Monthly	Fortnight

The investigation revealed no similarity or consistency in grading. Both the designations used and the implications as to authority and responsibility varied considerably. For instance, in the choice of titles various companies used the term "supervisor" as subordinate to, as a substitute for, and as superior to the rank of "foreman". Similar inconsistencies are also to be observed in the use of the title "superintendent".

Again, whereas some companies have found it more convenient to relate grading to the number of employees controlled, others have chosen the alternative method of area of control. For instance, chargehands control the men operating one machine, assistant foremen a battery of machines, foremen a complete process, and department managers a group of processes.

Both the choice of terms and the manner of grading appear a matter of individual inclination where custom in the trade, district, and company are influential factors. Neither would a universally recognised terminology serve any valuable purpose. Conditions between companies, and even between departments, vary so much that neither the number controlled nor the area under

supervision may be used consistently. The type of work and the relative skill of operatives concerned may become deciding issues.

Precise designation helps the executive immeasurably in exerting his authority and facilitates greatly the task of impartially administering staff benefits so as to avoid discontent. Where all departmental supervisors enjoy the same title, there is general expectation in receiving the same or similar conditions of employment, irrespective of the size and technical nature of the separate departments.

A number of companies, which have recently reviewed their supervisory staff and introduced new methods of management, have preferred also to eliminate the use of the term "foreman", no doubt because of the poor practice associated with it formerly. Companies that have been concerned with building up a new supervisory force with a new outlook and new methods, have frequently insisted on a good educational standard, with minimum technical qualifications of National Certificate standard. Such persons are given the rank of department managers, those below this rank are regarded as assistant managers, supervisors, and section leaders, and those above it as superintendents, works managers, and works directors. There is a strong feeling that a foreman should be the manager of his department and take a much broader view of its affairs than is usual, and, with this higher grade of staff, should be associated the title department manager.

A large chemical manufacturing company reported that in taking steps to improve the status of supervisors, it instituted a scheme whereby certain selected foremen of good standing were appointed to a new grade called Staff Foremen. This grade, while not affecting the basic salaries paid, was established as monthly staff and, in this way, distinguished from other foremen paid weekly. Other facilities gained included admission to the superannuation scheme and additional benevolent grants.

78. Payment Arrangements

Out of 100 companies providing information on their method of paying foremen, it was found that 4 paid on an hourly basis, 64 weekly, and 31 monthly. Those few companies paying hourly rates had no weekly payment for foremen. However, some firms specified hourly rates for chargehands and weekly wages for foremen, with monthly payments for those above the rank of depart-

ment foremen. In a few cases, wages were paid fortnightly in order to distinguish an intermediate grade.

It is thus seen that the practice of paying foremen on an hourly basis is almost extinct, and the prevailing custom according to the practice reported is two-thirds in favour of weekly wages and one-third preferring monthly salary.

The method and manner of payment is appreciated by the foreman as distinguishing and emphasising grade, and with it, relative importance in the company.

Tied up with the period of payment is the manner in which the pay envelope is delivered. It is sometimes customary for charge-hands to collect their wages with operatives. Foremen either call at the wages office at a prescribed time, or their wages are delivered to them in a sealed envelope by a wages clerk. Weekly wages are paid in cash, while monthly salaries are paid by cheque either direct to a banking account or delivered by a wages clerk. Some oldestablished firms adhere to the practice of wages being handed over personally by a senior executive, either the works director or works manager. This method is fast receding in favour of the more businesslike practice of payment direct from the wages office. Impartial payment has replaced paternalism.

79. Overtime

Except in the case of those paid on an hourly basis, most companies regard the weekly wage as compensating any excess between undertime and overtime. However, in special conditions resulting from war production, where abnormal and excessive overtime has become necessary without any compensating undertime, temporary arrangements have been introduced. Where a regular 47-hour week has been increased to a consistent 55-hour week, a number of companies have combined an agreed sum in compensation with a cost of living allowance to produce a war bonus, which is reviewed as circumstances change. Other companies record the overtime hours weekly and pay for them at straight hourly rates, average rates plus 20 per cent, or time rates plus one-third. Distinctions are sometimes made as in a leading aircraft manufacturing firm where overtime on day work is paid at ordinary rates, night work at time and one-fifth, and week-end work at time rate plus one-third.

It is the practice in some companies where overtime occurs

occasionally and cannot always be forecast, to review the extra hours worked either quarterly, half-yearly, or annually, and to make an ex gratia payment at the discretion of a senior executive.

In one company where adequate assistance is assured as established policy for training, expansion and replacement, any overtime worked by the departmental foreman is repaid by the same amount of time as leave with pay.

80. Leave with Pay

The analysis of questionnaires indicated generally that out of 100 companies, 5 give one week's annual holiday to foremen, 70 give a fortnight, and 25 three weeks under certain conditions. The figures serve the purpose of indicating general practice, but must be interpreted in conjunction with the grading in force. As previously explained, the work of a foreman in one company may be equivalent to that of a chargehand in another, or to a manager in yet another. However, it is indisputably clear that few companies regard one week as sufficient holiday for a foreman, and the majority favour two weeks.

In practically all cases, statutory bank holidays are allowed and excluded from the arrangement for annual holidays. However, where a factory closes down for a week as a general works holiday, this is included in the annual allowance for foremen.

It is fairly common practice to include in holiday privileges certain conditions relating to length of service. For instance, no annual holidays are allowed under 12 months' service in some companies, while others accommodate a new appointment by permitting one day's holiday for each month worked during the first year of service. Other companies, where holidays are not specifically related to staff grading, allow a fortnight's annual holiday up to fifteen years' service, and three weeks thereafter.

The practice of occasional leave also enters into the arrangement for annual holidays. Generally, provision is made for occasional leave with permission in addition to a fortnight's annual holiday, but is taken out of the holiday where three weeks is the common practice. Occasional leave in most companies is not excessive and is often not recorded, but where the privilege might be abused or favouritism suspected, a definite limit is prescribed, such as a Saturday morning leave every month, every two months, or every quarter. Occasional leave is sometimes granted as a reward for specially

meritorious performance, where it would probably be better appreciated by the foreman, and more convenient to the company, than cash payment.

Prevailing circumstances and past custom in the trade, district, or company play an important part in the final decision on leave with pay. The length of the working week, amount of overtime, and periods of special difficulty, all have to be considered. Last but not least is the comparative privileges for operatives and office staff. Where the practice is fast gaining ground of extending annual holidays and introducing works holidays with full pay, it is necessary, human nature being what it is, to review the provisions made for foremen to ensure that the distinction in status is maintained and emphasised.

One feature which has been introduced to a much greater degree than formerly is the guaranteed working week to operatives. Some companies, faced with the increasing difficulty of securing and retaining operatives, have advanced the level of minimum guaranteed wages from 36 hours to 44 hours a week. Other companies, functioning under the Essential Work Order, are obliged to guarantee a minimum of 47 hours at standard time rates for time-working operatives. The newly raised guaranteed weekly wage means that whereas formerly operatives suffered loss of pay during periods of short time and the foreman had the advantage of an assured weekly wage, there is now little or no difference in this respect between the two grades.

81. Personal Privileges

In raising the status of foremen it is not only necessary that the management should recognise his importance, but that operatives also should come to appreciate his position of authority. The management judges the foreman on results, but the operative often distinguishes him by the outward signs of prestige. It is especially necessary to-day that authority should be clearly defined and unassumingly implied rather than aggressively asserted. Although personal influence is paramount in establishing effective supervision, it often helps the foreman considerably in his day-to-day contact with operatives to display and enjoy privileges that lower-placed personnel are not permitted to share.

The essential issue in raising status is to establish the foreman as part of the management rather than as a slightly higher placed

operative. In creating a better team spirit among supervisors, they should be given facilities which bring them more into contact with each other and with the management, rather than force them to find friends among their subordinates, or in self-defence to set up an unnecessarily severe barrier in order to preserve authority not otherwise established.

The questionnaire inquiry revealed that while many companies have placed the supervisory force on a staff basis for payment of wages, benevolent funds, and pension purposes, they appear in a surprising number of cases to have ignored the smaller privileges which can be seen daily by operatives. The majority of companies with canteen facilities have made arrangements for foremen to enjoy the privilege of the staff canteen, although in a number of firms no such provision is made for those of supervisory rank. The practice of having separate cloakrooms and lavatories for foremen seems even less well established. Arrangements for mid-morning and mid-afternoon tea breaks vary with the type of work, practice for operatives, size of the company, and the provision of chargehands. The most restraining influence against the extension of privileges is the danger of abuse. An even greater danger lies where production suffers because privileges have not been granted openly and officially.

Other privileges as to the relaxation of "clocking in" and even of "signing on" have been established for some time in companies of moderate size, although cases still exist where the foreman apparently cannot be trusted to attend regularly and promptly without a proper check.

In some companies where departmental records demand it, the foreman is given the facility of a desk and sometimes an office where he can deal with paper work, and where drawings, instructions, schedules, piece-rate earnings, and so on, can be examined and kept on file. Some companies reporting find it an advantage for the foreman to have a workshop office where discussions with the management can be held in comparative privacy. In some cases the need to criticise and correct workers in private is essential, first so that the attention of the person concerned will not be diverted by other things going on around him, and secondly, so that he will not feel personally aggrieved when other employees overhear and greatly enlarge on what has been said. The reprimand is likely to be more effective and less resented when conducted in private

between the supervisor and the operative. Office facilities help also when the foreman has to discuss problems either with representatives of supplying companies or even with customers.

82. Benevolent Grants

There appears to be no standard practice in the administration of benevolent fund privileges. Arrangements vary from the niggardly to the generous; from indefinite individual decisions to fixed scales; from funds administered internally to comprehensive schemes contracted out; and from contributory to non-contributory arrangements.

Many small companies reported favouring the flexible method where the sickness or accident of a foreman is dealt with on individual merits and regarded as a gift given by the company, depending on the current state of prosperity. In such cases, a senior executive usually reviews the circumstances and reports to the directors with a recommendation, which is either approved or modified. This gives the company an opportunity to repay long service and to discriminate between the older and younger employees. It permits distinction to be made between cases where absence through sickness or accident has arisen out of and in the course of his employment or where it is due to personal and private circumstances. Distinction can be made also between the malingerer and the genuine case; between the proficient and the average foreman; and between cases of persistent illness and those where it is unusual.

Large companies, where cases of absence through sickness are more frequent, find it necessary to adhere to set scales of payment with provision for modification in exceptional circumstances. The simplest form reported by some companies is two weeks at full pay and two weeks at half-pay in any year, with provisions for review.

Some companies make a weekly sick payment subject to deduction of the amount payable under the National Health Benefit Insurance; others regard sickness as a period of heavy expense to the foreman and make no deductions. The two policies are clearly marked by the need to prevent malingering, as might occur when the employee receives more than normal income during sickness, and the desire to assist the genuine case of temporary hardship.

One large telephone manufacturing company has had in operation for many years a non-contributory sickness and accident plan

which extends to all employees, irrespective of rank. For accidents occurring during the course of employment, relief is allowed without prejudice to any subsequent court settlement on the basis of full payment of wages for the first 13 weeks, and, if necessary, half-pay for a further 39 weeks. In addition, any reasonable expense incurred for medical, surgical, nursing or hospital service and apparatus, is fully defrayed in a period up to one year. For sickness or accident not due to employment, full pay is allowed for the first two weeks, and thereafter allowance of one week sick pay for each year of service up to 11 weeks, followed if necessary by half-pay at the rate of 3 weeks for each year of service to a maximum of 39 weeks' benefit. Any benefits which the company is obligated to pay under an award of Workmen's Compensation Acts is deducted when computing benefits under the plan. Provisions are also made for retirement pensions, disability pensions, death benefits, and pensions to dependents.

Another large company with a non-contributory plan pays sickness benefit to foremen on the basis of two days' pay for each completed month of service up to a maximum of 26 weeks' full pay. Amounts payable under the National Health Insurance are deducted. Full wages are paid for accidents occurring during employment, subject to deduction for any sum payable under the Workmen's Compensation provisions. Death grants amount to one year's salary.

In deciding the extent of benevolent gratuities, it is necessary to stipulate conditions to safeguard the future. It is thought undesirable to establish schemes of generous payment in good times and be unable to continue them in poor times.

Many companies, especially the larger concerns, realise the need to be relatively generous in cases of sickness or accident to their supervisory staffs, yet feel unable to justify the additional expense entailed. In consequence, there is an increasing tendency to place benevolent gratuities on a contributory basis where each staff member is free to participate, the subscription to the fund being shared equally or in some other proportion between the employer and employee.

Instead of the employer contributing to a benevolent fund according to requirements, an annual amount, more or less prescribed, is paid to a fund which is increased by subscriptions from staff. For a small weekly deduction from salary the foreman receives increased

benefits at a time when they are most needed, without feeling under entire obligation to the benevolence of the employer.

Opinion is divided as to whether benevolent facilities ought to be contracted out or administered internally. The decision no doubt depends on the size of the company; its ability to set down a substantial amount to fortify the fund in the early years; its general policy on self-administering or disposing of financial risks; its intention to include or exclude those of operative rank; and the extent to which accidents and sickness are likely to occur because of the special type of manufacturing process.

A typical scheme in operation in one large motor-car manufacturing concern is contracted out to an insurance company. Contributions, of which the company subscribes half and the employee the other half deducted from wages, vary in amount according to weekly earnings, so that weekly benefits in the case of sickness or accident range correspondingly. For example, a foreman earning $\mathcal{L}7$ per week makes a weekly contribution of 1s. 6d. and receives benefit at the rate of $\mathcal{L}3$ 9s. per week for a maximum period of 26 weeks. These benefits are paid in addition to any sums made available under the National Health Insurance scheme. Life Assurance is the subject of a separate scheme requiring additional contributions.

A number of large and important companies engaged in the engineering, shipbuilding, and allied trades have chosen to contract out their mutual benefit facilities to the Foremen and Staff Mutual Benefit Society. This Society, which has no trade union connection, was founded in 1899 and is registered under the Friendly Societies Act, 1896, now has an annual income of £580,000, assets of $5\frac{1}{2}$ million pounds, and pays benefit of £200,000 yearly. Membership, which now exceeds 34,500, is limited to foremen and staff over 21 years of age, both male and female, employed by companies who are members of approved Federations and Associations engaged in the engineering, shipbuilding and allied trades. An employee is only accepted by the Society when the application is supported by his employer.

The contribution for benefits is made jointly by the employer and employee. The normal contribution is usually 5s. a week and is shared equally between them, and the benefits may be summarised:

Sickness benefit of 25s. a week for the first year, and thereafter until recovery 15s. a week.

Maintenance benefit, during unemployment, of 20s. a week for the first 3 months; 15s. a week for the second 3 months; 10s. a week for the third 3 months; 7s. 6d. a week for the fourth 3 months, with further payments for those with over 5 years' and 10 years' membership.

Pensions are paid on a scale which varies, like other such schemes, with the age at entry and the date of retirement. A foreman entering the scheme at 32 years of age and retiring at 65 years, receives for the normal contribution of 5s. a week a pension of £52 per annum guaranteed for a minimum of 5 years after that age and so long thereafter as he survives.

Funeral benefit of £15 is payable on the death of a member's wife if she pre-deceases him, and life assurance of £40 on death of a member (whether before or after pension age).

Returns of contributions are made on a member's death or withdrawal from the scheme before pension age. Special facilities are provided when the foreman takes up another appointment with a non-contributory company.

The advantages of such a scheme are clear. For a known contribution the employer disposes of all the responsibilities and difficulties entailed in the considerate and impartial administration of a benevolent scheme. All problems of actuarial stabilities are devolved and all questions of misunderstanding and disappointment are avoided. Neither philanthropy nor favouritism enters into the arrangement. Where no such scheme has previously existed, it provides an attractive and comprehensive plan of benefits usually appreciated by the staff concerned, which raises the foreman's status and improves industrial relations.

As with all similar schemes, whether contracted out or otherwise, existing staff members are left entirely free to contribute as they please, but with newly engaged or promoted staff the company usually insists on inclusion as a compulsory condition of appointment.

One of the most difficult problems entailed in providing pensions for staff is the differing ages at the commencement of the scheme. Experience has shown that the older and more experienced senior foreman with many years of service in the company, either finds

the benefits, because of his age, insignificant, or the contribution exorbitant. These cases, and also those where more generous benefits are required for senior staff, can be met under the Society's supplementary premium tables. Sometimes such cases are left out of the scheme and treated on their merits when the time arrives and depending on the circumstances in which the company is placed.

It is customary to regard foremen as staff, and to provide a minimum of two weeks' sick pay. Some companies do not regard this as sufficient and, as a first step, grant a further two weeks at half-pay. For those companies that have been in existence a long time and have many old-established employees, the tendency is to be more generous with benevolent grants for foremen and other staff. Where there is possible risk of bad times and difficulty of meeting an increasing financial obligation in the future, a comprehensive scheme is introduced where the contributions are shared equally or in some other proportion to provide increased benefits. Such schemes are either administered internally or contracted out to insurance companies, according to circumstances.

No doubt the provisions proposed under the Beveridge Plan for Social Security will deter to some extent the introduction or improvement of benevolent privileges of the more permanent character. Even so, there appears no reason why existing arrangements should not be reviewed in the light of current practice and temporary provisions made pending post-war possibilities for more generous allowances on a national basis. The Beveridge Plan raises the whole question of whether benevolent privileges are the concern of the country or a matter for individual companies. Where employees are dependent on the generosity and prosperity of their employers, obvious discriminations appear unfair. Contributory plans might cease with a comprehensive scheme for national social service because of duplication and the unwillingness or inability of employees to make subscriptions to both funds. The non-contributory schemes would also be withdrawn on the grounds that the employer would be contributing compulsorily to the national fund instead of to the company funds.

Many issues are naturally involved, especially as the degree to which the proposals for Social Security are to be carried is necessarily indefinite, as is also the possible date of their introduction. In any case, there appears sufficient justification to review benevolent

provisions both now and after the introduction of national services later, to ensure that the foreman receives benefits sufficiently in advance of the operative for the distinctive recognition of status and the reward for responsibility.

83. Pension Schemes

Whereas the inquiry revealed great variety of practice in the administration of benevolent grants, the practice in regard to pension schemes is marked by a decided degree of consistency. Ninety-five per cent of the companies completing the questionnaire have a scheme for superannuation and retirement pensions. Few companies favour indefinite arrangements where the directors decide on the amount of pension after reviewing length and value of service, and after bearing in mind current and future financial commitments.

Companies who, enjoying good profits and viewing the future as one of prosperity, have embarked on pensions to employees without requiring joint contributions or setting up an actuarily sound scheme, later during periods of depression have found the commitment a serious liability. In such cases, existing pensions have been honoured, and any rights or expectations of other employees have been cancelled.

The inquiry indicates that the weight of opinion in regard to pension schemes is definitely in favour of joint contributions. Practice as to whether the scheme should be administered internally or contracted out to insurance companies appears fairly evenly distributed.

Some indication of the extent to which pension schemes have been adopted by industrial concerns is provided in the more extensive and authoritative review made by the Ministry of Labour, published in May 1938. All employers throughout Great Britain, with the exception of Government Departments and local authorities, who were known or believed to have schemes in operation at the end of 1936, were asked to furnish particulars, and these, when summarised, produced the following results.

Of the 6,544 employers who were contributing to pension schemes, 4,944 were doing so exclusively for the benefit of administrative, supervisory, and office staffs; 1,520 included both administrative and manual staffs; and 80 applied to manual workers only. There were 3,106 schemes operated direct by firms and 3,861

operated through insurance companies (the excess of total of schemes —6,967—over the number of employers is due to some companies employing both methods). The number of employees concerned is given as follows:

Class of Employees	Contributory	Non- Contributory	Total
Administrative— Males	466,583 107,898	170,851 57,303	637,434 165,201
Total	574,481	228,154	802,635
ManualWage Earners	1		
Males	356,276 72,718	288,315 97,149	644,591 169,867
Total	428,994	385,464	814,458
Total	1,003,475	613,618	1,617,093

When the relative proportion of administrative and manual staffs normally employed is taken into consideration, these figures stress that pension schemes apply chiefly to supervisory grades. Further, the Ministry of Labour inquiry reported the consensus of opinion in practice as undoubtedly in favour of schemes where both employer and employee pay contributions. In schemes where no contributions were made by employees, these were nearly all operated by individual undertakings and financed by internal funds. Practically all the employees covered by schemes operated by insurance companies were paying contributions. With internally operated schemes, one-third of the administrative grades and over one-half of the manual wage earners were not required to make contributions.

The amounts of the contributions vary with the benefits offered and the conditions applying. Variations exist as to the age of retirement; the arrangements for return of contributions or payment of lump sums in event of employment terminating; the allowance or pension granted for total disablement; the endowment due to women employees retiring on marriage; the employee's age on entry into the scheme and the rate of remuneration; and the treatment of back service. It was found that the amount contributed by salaried staffs ranged from 2 to 5 per cent of earnings. The

upper limits might be exceeded by older entrants. In contributory schemes, the amount paid by employers equals that subscribed by employees, and this applies to most funds and to many insurance schemes.

The pension provided is in practice often calculated on the basis of \mathcal{L}_{I} per annum for each shilling of weekly contribution multiplied by the number of years of insurable service. A contribution of 2s. per week for 40 years secures a pension of \mathcal{L}_{80} per annum.

From the particulars supplied by companies circularised by the Ministry of Labour, it appears that pension funds generally are provided for foremen either in an administrative staff scheme, sometimes as a separate grade, or they may be included in a general scheme for workpeople. One large combine has a separate scheme for foremen, but this is exceptional, and probably due to the magnitude of the undertaking.

It might be concluded that as a general rule both the employer and the foreman contribute equally in weekly subscriptions. The employer usually provides the initial solvency payment for the fund.

When a man leaves a concern covered by a pension fund to go to one which has no fund, his contributions are repaid with or without interest, but if the latter has a fund, and both are approved by the Revenue under Section 32 Finance Act 1921, the contributions can be transferred and the man's pension rights reserved.

Where companies provide pensions schemes for manual workers, the foremen would also be embraced, but in some cases the foremen might be provided for even if the manual workers were not covered. Normally, an employer first provides for administrative and staff grades, and then frequently at a later date manual operatives are embraced at somewhat lower contributions with correspondingly smaller benefits.

Pensions schemes vary both as regards contributions and benefits, so that no attempt is made to present either an exhaustive analysis or a comprehensive description. It may be of benefit to summarise the provisions of a typical scheme, applicable only to administrative, supervisory, technical, and clerical staff, not otherwise covered by compulsory contributions under the National Health Insurance and Pensions Acts.

The scheme, when introduced, was made available to the admin-

istrative grades with a minimum of 3 months' continuous service, and over the age of 21 and under the age of 50. A pension for life is provided for members from the age of 65. The cost of the benefits is shared between the company and the employee. Contributions are made in accordance with the scale which varies with salary class. The directors, when substituting a contributory scheme for an old-established non-contributory plan for a limited grade of employees, met the entire contributions of those so affected by the changeover. The company, although anticipating to meet its obligations towards the annual cost, reserved the right to discontinue or modify the scheme in the event of unforeseen business conditions arising. In the event of amendment or discontinuance, pensions already being paid and benefits secured up to the date of alteration would not be affected. Membership of the scheme was imposed as a compulsory condition of employment.

A typical example of contributions and benefits is provided as follows:

3 years (salary £251-£300) with contribution of 5s. weekly; 10 years (salary, £301-£350) with a weekly payment of 6s.; 10 years (salary, £351-£400) with 7s. weekly contribution; and 12 years (salary, £401-£450) with 8s. weekly deduction from salary, makes a total paid by employee of £626 12s.

Pension at 65 years is computed in a similar way by reference to fixed scales: 3 years at £5 per annum; 10 years at £6 per annum; 10 years at £7 per annum; and 12 years at £8 per annum, providing a total of £241 per annum as pension. Thus, if the member enjoys the pension for 10 years he receives £2,410. If he dies after one year, he receives as a pension £241 and his estate receives £,964, giving a total of £1,205.

For a contribution which varies from $3\frac{3}{4}$ per cent to 5 per cent of salary, the foreman receives an insurance against old age and death benefits on highly favourable terms. Pension schemes are usually explained in non-technical language and published in handbooks. The contribution permissible is limited to a stated percentage of salary. Benefits are computed strictly on the amount of contributions and period over which they were paid. Usually, no medical examination is required by those joining industrial pension schemes. In the event of death before reaching the age of retirement, an amount equal to the contributions paid with or without interest is made available to the estate of the deceased.

In some cases a lump sum, dependent on salary class, is also payable in addition.

In the event of an employee leaving the service of the company for any reason except retirement on pension or death, he may be offered several options. He may take a refund of all his contributions to date; or he may continue his contributions and make separate arrangements with the insurance company; or he may take the pension due at the specified age according to payments made; or, in the event of his new employer administering a similar scheme, past contributions can be continued in the new company. It should also be noted that subject to the approval of the Inland Revenue Authorities, contributors who are liable to income tax will be entitled to rebate of tax in respect of their contributions in accordance with the terms of Section 32 of the Income Tax Act 1918, as amended by subsequent Finance Acts.

Opinion appears to be divided on the question as to whether staff pension schemes should be self-administered or contracted out, and it is outside the scope of the present investigation to pursue it further, but there is no doubt that all schemes should be contributory and the funds fully secured.

84. Associations

In companies employing twenty or more foremen, the need has arisen for some sort of association which can bring together all those of similar supervisory grade for social, instructive, and representative purposes. Although the number of associations has grown rapidly in recent years, they have been long established in some concerns, such as Cadbury Brothers, where it dates back to 1913.

Associations have been set up in some companies as the result of requests from the foremen themselves, but in many cases the company has taken the initial steps as a preliminary to, or in conjunction with, the introduction of a training programme. In fostering the growth of an association, one company gave as its reason an extension of their "general policy of trying to build up a corporate spirit among foremen".

The constitution of a foremen's association varies according to its purpose. Sometimes it is entirely social in character, resembling a club; sometimes it embraces facilities for discussion; sometimes it incorporates educational training courses; and sometimes it in-

cludes the self-administration of benevolent facilities. The objects reported under a typical constitution are:

To provide a means for increasing co-operation between the management and the foreman.

To provide a means for frank discussion of matters affecting efficiency and economy of production.

To assist the management in matters affecting the safety of the employees and the plant.

To provide every foreman, through accredited representatives, with a means for ventilating matters detrimental to harmonious working.

To act as a channel through which all the foremen may be informed as to the policy and business enterprises of the company.

To advise and assist the management in matters affecting the welfare of the company and the foremen.

Membership is restricted to specified grades in the supervisory force, either including or excluding departmental managers and chargehands.

Most associations are self-managing. The chairman and other officers are elected, sometimes by secret ballot. The members agree on a nominal levy, but not infrequently the association is generously supported by the company who, in addition to providing a meeting-place, subscribe to the general funds.

Where the association is primarily of a social character meetings take place outside normal working hours, although relaxation of the rule might be made for occasional committee meetings.

Where the purpose of the association provides for discussion meetings of a kind closely related to company activities, it is common for the management to take a much more active part. The works manager or some highly placed official acts as chairman, although the other officers may be elected. Meetings take place on the company's premises and sometimes wholly or partly in normal working hours. The company bears either the whole or the greater part of the expense.

Another example of a foremen's association was reported from a large company in the electrical industry, where the purpose is primarily educational and secondarily social. This association has as its objects:

- 1. To encourage a spirit of friendly co-operation amongst its members;
- 2. To provide amongst its members facilities for the exchange of knowledge by means of lectures, group discussions, visits to other industrial establishments, and in other ways to enable members to achieve higher standards of efficiency;
- 3. To provide a medium of access to the management for discussions on all matters relating to the welfare of the members of the association and the company.

Membership is open to works staff personnel in the following groups:

- 1. Superintendents or heads of departments.
- 2. Foremen.
- 3. Assistant foremen.
- 4. Others on works staff who have the responsibility of controlling labour.

The management of the association is vested in a general committee comprising representatives of departments or groups of departments, elected by ballot.

The essential difference between a foremen's conference and a foremen's association is that the former is almost entirely controlled by the company as to constitution, frequency of meetings, and subjects of discussion, while the latter favours a free organisation of all foremen and is self-managed. The one deals exclusively with company business and is held in working hours, while the other is largely social and is conducted externally.

Where the foremen's association functions under the guidance of the management, monthly discussion meetings are a common feature. The subjects for discussion vary, and this is necessary if continuous interest is to be maintained. In one company that reported, the subjects dealt with were:

Essential Work Orders.
Air Raid Precautions.
Protective Clothing and Coupons.
Absenteeism.
Safety in Factory and Cost of Accidents.

Workmen's Compensation. Factories Act (1937). Employees on National Service. Air Raids and Employees' Needs.

Another series of meetings was devoted to the consideration of departmental organisation, where each foreman described the work and explained the features of his department. Yet another series of meetings has been arranged where departmental chiefs address meetings on collaboration between their departments and the foremen.

A further feature of an association's activities is the week-end conference. Commencing after closing time on Friday night, one company reported, a dinner is followed by an address on a subject of vital interest to foremen, either by a director, a high executive of the company, or an outside specialist. Meetings follow on Saturday morning and afternoon, interspersed by a luncheon. The expenses are borne by the company

The annual foremen's dinner is a not unusual practice, when the managing director reviews past results and outlines current policy. In pre-war years, inter-works visits were arranged and sometimes an annual outing was an established custom.

85. Councils

In spite of apparent looseness of terminology, in practice the foremen's council is to be distinguished by being a body elected by and representative of the supervisory force.

The objects of the council, in a typical case, are to provide opportunities for representatives of the company and the foremen to meet together as a composite body to discuss matters which concern the foremen, and to provide a recognised channel of communication, consultation, and co-operation between the company and its foremen.

The council represents the foremen's interests to the higher management of the company. In one concern reporting where the foremen are members of, and represented by, a trade union, the council consists of ten executives appointed by the company and ten elected foremen, one of whom is the district secretary of the union. The council in this case is a negotiating body, and all reasonable expenses are borne by the company. The other type

of council, which in many respects resembles the association, is a body elected by foremen and provides the nucleus from which are elected representatives to serve on the Joint Works Council.

Some councils are constituted chiefly with a view to settling disputes on wages and working conditions, but in other concerns these aspects are strictly excluded.

One company with two hundred foremen provides in the constitution of the council representatives of the supervisory force elected by ballot. Half are elected each alternate year, thus preserving continuity. The managing director, works manager, and chief engineer are members of the council ex efficio, and a member of management occupies the chair. Meetings are held about six times a year, when complaints which cannot otherwise be settled by the appropriate department are dealt with.

In another company with one hundred and twenty foremen, the council consists of sixteen foremen elected from among themselves, and eight management members appointed by the company. Its functions are purely advisory or consultative.

The foremen's council is receiving a good deal of attention at the present time due to the increasing activities of trade unions.

Some companies insist that where an operative is raised to the rank of foreman he is requested to withdraw from trade union membership, or alternatively, for the purpose of receiving benefits for which he has already contributed, it is commonly understood that he takes no part in union activities.

Where the foreman receives no corresponding benevolent facilities from his company, either direct or indirect, a certain hardship is suffered. However, the present interest in staff unions is no doubt due to those temporary war conditions which have placed operatives in many cases on a better financial footing than foremen and other staff grades. It is often only where management has failed to bring about a proper understanding with its staff that they resort to unions for representation and support. The likelihood of union activities is greater in the large companies than in the small.

It is felt that staff members in many cases can only be fairly dealt with on an individual basis and that it is a mistake to enter into negotiations with trade unions, except where grades are large, easily defined and well established, when minimum conditions

are best dealt with for a whole industry by the Employers' Federation than by the companies separately.

The alternative to the employer taking foremen into council is that the foremen either resort to trade union representation or otherwise regard themselves as a body akin to operatives and opposed to management.

86. Conclusions

As the post-war years approach, the conditions of national and international trade become increasingly more clear. Great Britain will find herself with consistently high wages, a demand for better working and living conditions, a high degree of taxation to pay debts and to provide new social services, and an inevitable trend toward shorter working hours. The freedom of action usually accorded to the entrepreneur will be curtailed within the framework imposed by government controls.

In spite of apparently unlimited demands in certain industries after the war, many companies will return to conditions of competitive trade. Such factors of production as the cost of materials may be more or less stabilised, and the wages of labour high and irreducible. Competition will tend to gravitate round competent management and productive personnel. The success or otherwise of a company will depend on the quality of its manpower and the effectiveness with which it is employed. Once employees have been selected, trained, and placed with a degree of precision greatly in advance of common practice to-day, the aim will be to build up and to make the most use of teamwork.

The responsibility for building up internal harmony, and the first steps taken, rest with the management. Before co-operation can be expected in the workshop, it must be an accomplished fact in the executive and supervisory force.

Prosperity, both national and industrial, will in the future increasingly depend on the existing character of social relationships, and in the business unit the foreman in his daily contact with work-people has an influence as yet not fully appreciated.

Most companies recognise the need for greater supervisory competence in the future, and must take steps to establish the position as one of sufficient importance to induce new recruits of suitable type and education, as well as to impel existing staff, to undergo training. The problem might be solved by offering higher standard

salaries, but this is often insufficient in itself because of the need also to establish the social significance of foremanship. Normally, the job demands that the foreman works as many hours as the men in his department; that he has vast practical skill and experience; that he has some theoretical knowledge of technical processes; has executive accomplishments; and has a suitable personal character. Salary alone is insufficient to induce such men to undertake the responsibilities involved.

At the same time, neither higher salary nor better conditions will produce of themselves competent foremanship. They are to be regarded, however, as part of a plan to create managerial teamwork and supervisory effectiveness which includes selection, training, and development, as well as new measures for collaboration and co-ordination.

Improvements in salary must be accompanied by commensurate returns if increases in cost are to be avoided. Extensions of privilege must also be selected carefully if they are not to be abused.

The report, in giving a statement of bonus arrangements for foremen in some of the leading companies in the country, shows the wide variety and lack of consistency in the plans in use. Such bonuses seem to be fairly common practice and vary with circumstances and with products. But it is made clear that the practice needs review so that certain weaknesses may be avoided where schemes exist and may be taken into consideration when formulating new plans. Provision should be made for regular review and revision as the conditions on which they are based change.

The primary purpose of introducing incentives for foremen is to increase efficiency. It is by this standard that profit sharing, departmental bonus, and improved status must be measured and decided. Stated more precisely: "Do the present wages and working conditions produce the best results possible from the supervisory force?" Further, "Would improvements in earnings or better conditions secure results commensurate with the cost involved?"

Higher wages and improved status for foremen are no solution for poor supervision and no substitute for indifferent management. Higher remuneration and status, except where they have been grossly inadequate, have no specific advantage in themselves. They cannot be considered as separate and isolated issues. They have

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meaning only in relation to better standards of production and supervision. They should be viewed as an essential part of policy for achieving general or specific improvement in the factory. The foreman's advancement should be related to, and go hand-in-hand with, factory efficiency.

The problems of salary administration and status improvement should be subordinate to the major problems of factory policy. Thus it is necessary first to analyse and state specifically in order of importance the directions in which improvement is most desired. This involves the examination of such issues as departmental costs, interdepartmental co-ordination, increased output, greater speed of production, improved quality, better industrial relations, saving materials, introduction of piece rates, economy in labour, more accurate planning, and so forth. Once the major problems have been defined and the policy has been settled, it is then possible to consider the relative influence and importance of supervision. This may involve the complete review of executive personnel with a view to deciding those to be retained, those to be trained, and those to be removed and replaced.

Depending therefore on the existing grades of management and quality of supervisors, the question arises as to how foremen can best be developed and how they can most readily be stimulated to greater efficiency. Many alternatives are available, ranging from more and better individual management to financial reward and intensive training.

The character of the problem as here described makes clear that no specific answer can be given for industry as a whole. In fact, the solutions will vary from industry to industry and from company to company. In lesser degree, they may vary from department to department. Each company has its own problems and each management must solve them.

The purpose of the present survey is to state the practice in some leading companies, which might help in the solution of specific problems. A summary of conclusions might run as follows:

(a) Financial incentives for foremen, whether group or inindividual, are not general, but are much more widespread than is usually supposed;

(b) Where bonuses for foremen exist, there is a tendency to

improvise a basis to produce an amount in lieu of cost of living increases;

- (c) Although profit sharing or group distribution from a pool is a common feature as a basis of foremen's bonuses, there is a tendency in favour of individual reward based on measured departmental results;
- (d) It is not always clear that foremen are fully informed on the basis of the bonus; advised of the computation of the amounts distributed; and the figures discussed with a view to improvement;
- (e) Only a few companies appear to have a definite policy for distributing to foremen information on cost and production, either in connection with bonus distribution or for the purpose of creating greater interest in and use of supervision;
- (f) Some companies are definitely against incentives for foremen, and instead prefer either a high standard salary or a moderate wage with compensating privileges;
- (g) Many companies in the past few years have reviewed, and at present are reviewing, the remuneration and status of foremen with a view to maintaining distinction in rank;
- (h) Some attention is being given to the influence of foremen on production and industrial relations, so that schemes of training are either in force or under active consideration;
- (i) There is a slight tendency, which should be encouraged, when introducing improved conditions of employment to extend these first to supervisory grades, or to give executives preferential treatment over operatives;
- (j) Larger companies, as a rule, tend to offer better personal amenities by way of pensions, sickness, and training than small firms;
- (k) There is an increasing tendency to introduce group pension schemes for executive grades, and chiefly of the contributory type;
- (1) Few companies have adequate training programmes for promoting new supervisors or for developing older foremen either by internal means or by external facilities;
- (m) Only in exceptional cases are provisions made to encourage and reward length of service;

- (n) Little attention has so far been given by most companies to special personal amenities inside the establishment or to separate social facilities outside working hours for foremen;
- (o) Only in exceptional cases do companies take other than casual interest in, or make separate arrangements for, medical attention to supervisory grades;
- (p) Internal conferences with foremen are becoming increasingly more widespread, both as a means of co-ordination and of training;
- (q) The Ministry of Labour Courses in Foremanship have given unusual impetus to external and formal training, which is receiving the support of many companies;
- (r) The greater awareness of the foremanship problem and the need to bring supervision into the managerial team has led to the formation of internal associations and councils of a self-governing character.

Although the development of foremen has met with a degree of resistance due to prejudice among the older and more experienced men, it is one of the most encouraging signs to note that among the younger men courses and conferences are received with unusual enthusiasm. Raising the standard of supervision is the full responsibility of senior management and ought not to be left to the individual inclination of the foremen themselves. Provided the measures taken are sound and proper preparation has been insisted upon, progress is rapid. The time for developing supervisory capacity and raising status is ripening. The foremen consider it long overdue. Experience shows that where any reform has been long delayed, there is a tendency for men to take matters into their own hands and to act often unwisely. There may be danger that unless management tackles the problem with speed and decision, foremen may resort to trade union support to achieve what they consider their just demands. Executive teamwork will be advanced if the present opportunity is used appropriately, but if ignored, it may be delayed indefinitely.

The aim of the new foremanship is so to build up the social significance of workshop supervision by careful appointment, managerial support, financial standing, and industrial status, that operatives have a new respect for, and are beneficially influenced by, the new departmental management.

SECTION X

LAUNCHING FOREMANSHIP DEVELOPMENT

87. The Foremanship Problem

Development in the social relationships in industry is not keeping pace with the development in technical organisation, and the lack of balance, which is a serious one, has to be remedied if industrial effort is to become completely effective.

What is essential to the full productive efficiency of the business unit is not a mere introduction of welfare amenities, but rather a new policy and, even more important, a new outlook on personnel problems and a new method of approaching them.

The problem of solving social difficulties may be dealt with negatively (a usual method) by merely conceding or negotiating employee demands, or it can be tackled positively by getting to the root of employee requirements, and trying to satisfy them before they become grievances. Whereas the former method is prepared to compromise under pressure of events, the latter foresees future trends and plans accordingly. The one policy leaves social organisation largely to chance; the other guides and fashions development. It is this latter approach, signifying positive and persuasive leadership, which must be adopted to-day.

Supervisory leadership is an attempt to apply to personnel problems those same principles of scientific method which have been successful with process problems. It is an attempt to bring about a better balance in supervision by giving closer attention to the requirements of social organisation in the business unit as revealed by present circumstances and future tendencies. It lays emphasis both on planning and on training. It indicates that although leadership should be more pronounced at the top, it should be disseminated with appropriate characteristics throughout the supervisory ranks. It contends that the management, from directors to charge-hands, should demonstrate that leadership is positive; that they can work as a team, avoid friction, and create harmony; that they can exercise a beneficial influence over subordinates; that they are conscious of a common aim, and endeavour to apply uniformly

a common policy. Before co-operation can be expected within departments, collaboration must be established among executives. The responsibility for bringing about this change in outlook and revision of policy must rest with the higher authorities in the business unit.

There has long been a growing conviction that the standard of foremanship must be raised, not so much from the aspect of trade knowledge and technical skill, which are better in Great Britain than anywhere in the world, but from its executive aspect of disposing of matters in a businesslike way, and even more particularly in dealing with workpeople. The chief source of dissatisfaction with the foreman is his failure to investigate matters thoroughly, his dislike of planning ahead, his tendency to do manual operations himself rather than to organise his operatives to do them efficiently, his inability to train effectively, and his incapacity to develop teamwork.

The foreman is not to blame. Appointments are normally made from among operatives outstanding for a high degree of skill and a long term of service. Craftsmanship and experience tend greatly to outweigh organising capacity and managerial aptitude. This gives rise to a class of supervisors who are first-rate technicians but only indifferent managers. The need for technical knowledge and trade skill is not underestimated, but for supervisory positions it is still more necessary to possess a capacity for organising technique and practical management.

Not only is selection often made on the wrong basis, but appointments are neither preceded by preparatory training nor followed by planned development. Operatives are chosen, often late in life, and without any proper preparation are pitchforked into positions of responsibility, sometimes in their own department, sometimes not, without instruction or guidance. Armed only with trade experience and technical skill, the foreman faces his one-time workmates with little but common-sense to help him.

In workshop supervision, as elsewhere, mere length of service and experience in a position of responsibility may, in themselves, mean very little. It is not experience, but the capacity to profit by experience, which counts.

Much dissatisfaction with higher management is expressed in the 21st Report of the Committee on National Expenditure, and elsewhere. But the management of a business is more likely to be kept

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up to date than is possible in the lower ranks of foremen, partly because of the better standards of education and training that prevail, and partly because declining profits often result in a change of manager. Whereas it may be comparatively simple to change the general manager, it is not so easy to replace a number of foremen. Dependence on process knowledge and trade experience often prohibits wholesale changes in the supervisory ranks. One or two foremen here and there may be demoted or dismissed for incompetence, but it is clearly necessary for policy to be based on development, rather than on replacement.

Before foremen can be developed effectively, it is necessary to recognise and accept the fact that fundamental changes have taken place in the manner of organisation and control of workpeople, calling for new methods and possibly for new men. Moreover, improvements in the standard of supervision are the primary responsibility of directors, managers, and leading executives, for they alone have power to promote and demote, appoint and dismiss. Little can be done to improve foremanship unless those in higher positions are convinced that it is both essential and practical, and therefore determined to take action. Once a decision has been made to raise the standard of workshop supervision as part of the policy for increasing war production and preparing for post-war prosperity, and for improving industrial relations through greater supervisory influence, the question arises as to what is the aim and what measures should be taken.

With this in view, it is necessary to consider the characteristic features of the new foremanship—to decide along which lines improvement is most necessary. Once this is clear, the qualifications and qualities of the new foreman need specification in order to meet the new requirements and new duties. On this basis, a review of existing foremen can decide those marked down for development, those to be temporarily retained, those to be replaced, and those to be trained for vacancies likely to occur.

One of the most important incidental questions to the improvement of existing foremen and the attraction of better educated men for supervisory positions is the salary offered. A better standard of supervision will demand, and be worth, higher remuneration than is now paid. Financial incentives require review.

Whereas foremanship development commenced in the United States in World War No. 1, it cannot be said to have emerged in

Great Britain until World War No. 2. Therefore, our best approach will be, first, to refer to, and to review, the experience available in the U.S.A., where the problem has received close attention; and, secondly, to see what can be learned from the experience of certain British companies.

Foremanship development should not be regarded as a new managerial device to be adopted and adapted from some arrangement elsewhere. It is not a single isolated device. Rather it is part of the policy for raising productive capacity and for improving industrial relations. Supervisory leadership must be more clearly understood, for it is that which welds together all those in responsible positions as a unity with a common aim. Leadership must disseminate from above, and with it, morale will rise from below. Collaboration in the management must precede co-operation in the department. Harmony among executives is a prerequisite to contentment in the workshop.

The foremanship problem can be treated as a single and separate issue, or it can be regarded better as part of a company's major problem of developing social relationships between directors, managers, foremen and operatives. In either case, it is desirable to review the steps to be taken to ensure successfully launching foremanship development. The programme is set out and briefly discussed under the following ten steps: Preliminary considerations; Define development policy; Review management personnel; Organise for development; Select foremen; Make training plans; Introduce conferences; Consider auxiliary services; Instal measures for control; and Examine remuneration.

88. Preliminary Considerations

Before any new policy can be formulated or introduced into a business, the chief executive officers of the company must be convinced that the new policy is essential and determined to carry it out in practice. Once the directors of industry and business managers are acquainted with existing trends and are aware of the likely character of future conditions, it is their duty to change their viewpoint accordingly, and their responsibility to introduce such measures as may be required. The function of leading executives is to safeguard the future well-being of the business unit against social as well as against economic developments. The serious concern of industrialists with the future is seen in the number of pro-

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posals made recently for reconstruction, and the attempts to plan for what are regarded as inevitable post-war changes. It is, however, incontestably true that the first step to be taken in order to accomplish any fundamental change in practice must be a genuine conviction that new policies and new methods are necessary and that they form part of a general plan. It must be understood that they can only be introduced gradually, and that they must be pursued sincerely and persistently. Changes brought about in this way from the top through the foresight of the higher executive officers, as opposed to having been forced from below by organised labour, demonstrate the existence of supervisory leadership.

89. Define Development Policy

Before fundamental changes can be made in the direction of personnel development, it is necessary to review what connection and relationship personnel development bears to changes in other directions. For instance, the possible expansion or contraction of activities has material bearing on future requirements and may involve, perhaps, the review of marketing and manufacturing policies. Where, for instance, company executives forecast lower prices and larger quantities, the contraction of better grades and the expansion of standard grades of production; and where competition for trade and labour is foreseen as becoming increasingly intensive, the future conditions are likely to demand more and also better trained persons in supervisory positions. Then too, the organisation of industry will have material bearing on personnel requirements. In this connection the possibilities of centralised, large-scale production may have to be compared with the potentialities of decentralised units on a smaller scale. The location of industries in relation to supplies of raw materials and skilled labour, as well as in relation to markets, must all come under consideration after a major upheaval. A settled plan will be necessary in formulating definite policies both for immediate preparation and for eventual introduction. The more definite and detailed the general plan, the more quickly and the more effectively can these be put into practice.

90. Review Management Personnel

With regard to technical as well as executive requirements, it is necessary to review existing management personnel in order to determine to what extent changes will have to be made. On

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account either of advancing age or of insufficient ability, some will have to be retired progressively, and their places filled either by promotion from within or by enlistment from outside the business unit. Of those to be retained, some may have purely technical qualifications and may be unsuitable for the control of staff, and these will be required either to undergo suitable training or to have their functions restricted to advisory and technical control. Of those remaining, some will need further training in technical matters, and all will require instruction in the new personnel policies and procedures to be introduced.

Although some improvements in practice can be effected by changing and training subordinate staff, these can never be completely successful if a sharp difference in viewpoint and method exists between the junior and the senior executives. Large-scale changes in staff are sometimes impracticable and sometimes undesirable. Long experience with diminishing effectiveness may not be exchanged rapidly, without adequate preparation, for short experience with growing adaptability. Appointments frequently have to be planned progressively so as to avoid loss in accumulated skill and ability while building up a new executive force. Whatever the circumstances, any senior management positions filled by men who are obstacles to progress, who conservatively resist innovations, and who obstruct the introduction and operation of new measures, must receive first attention before new procedures are put into practice.

91. Organise for Development

It is now widely realised that development is a major function of higher administration, and should be properly provided for in the business organisation, and intimately associated with planning and training. In a small company, this function might receive the part-time attention of the managing director, but in a large company it would fully occupy a special department. Development, whether technical or otherwise, and whether primarily the responsibility of separate functional departments or not, should be co-ordinated under one central authority so that progress in one direction can be balanced and interlocked with advancement in other directions. Wherever the function of development is recognised and provided for, it should be closely linked with the highest executive officer and might be undertaken by the managing director personally or by some personal assistant under his immediate supervision. The

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development of executive personnel is thus sometimes conducted by the works manager, and sometimes under his direction carried out by the personnel manager. These details must be settled individually for each business, and determined by circumstances and by the relative competence of executives employed in the different departments.

There is, however, some advantage to be gained by centralising personnel training ranging from executives to operatives, for it permits the employment of a specialist, it makes for uniformity of procedure, and it avoids overlapping in practice. In a company large enough to justify it, it may be advisable, as a preliminary step, to consider the appointment of a training specialist to prepare and plan for personnel development, and to conduct the necessary conferences and carry out the required individual instruction. Whatever the decision as to the appointment of a training specialist or the assignment of an existing employee, suitably qualified, to be responsible for development, the need for a central authority, the desirability of a proper policy, and the advantage of a definite arrangement for intensive training, should be appreciated.

92. Select Foremen

To make sure that training is to justify itself, those affected must be reviewed and selected. If any existing foremen are unlikely to respond to training, it is advisable to consider progressive replacement. In this event, training will fall into two groups: the improvement of a selected number of existing foremen; and the training of prospective supervisors required for vacancies likely to occur at a future date. These two groups demand different methods and separate arrangements. It is inadvisable to place them together, even when the numbers are small, as those who already have supervisory experience should be developed in a different way from those without any supervisory background.

The selection of foremen for future requirements calls for a review of the character of work they may be expected to do. One of the chief problems in the selection and promotion of foremen is the amount of technical knowledge and skill they must possess in order to fill their positions satisfactorily. Naturally, in some trades and with certain jobs such skill is more important than in others. On the whole, however, too much consideration is given to technical accomplishments, and too little to business capacity, executive

ability, and the personal qualities required for success in supervision. In some cases, technological control may have to be separated from labour control. Precise job specification should precede selection for training:

A training programme can be planned only after the training requirements have been determined. Whatever may be decided in this respect, it may commence with a preliminary and general arrangement for all those in supervisory positions, and develop later as experience shows best. It may have to cater for older and established foremen by conference methods and for younger and prospective supervisors by intensive class training. In addition, special supplementary arrangements may be made for individual requirements as regards either technical or executive instruction.

The more intensive and thorough-going the training plan, the more important it is to foresee future demands and to make provision for promotion within the management; for demotion or dismissal; and for wastage due to one cause or another.

93. Make Training Plans

If training is to be successful, it must conform precisely to the company's supervisory requirements, and it should be conducted intensively according to the plan decided upon. The degree to which the programme shall be general or detailed must depend on how far the company is prepared to go in expense, the amount of time it is agreed to spend, the period over which the plan is to be developed, and the character of training necessary.

In nearly all cases where organised training is an innovation, it is necessary as a preliminary measure to create the conditions for development. This involves a review of, and an improvement in, day-to-day contacts. In fact, some preparatory work may be required in existing management so that relationships with foremen are progressively advanced by such day-to-day contacts. It is a mistake to plunge into a full-scale, intensive, all-out training programme without paving the way beforehand for its favourable reception. Unless this is done, there may quite likely be a clash between the new methods taught to the foremen and the old ways practised by other executives.

Foremen must be convinced that the new policy is a sincere and genuine attempt to bring about improved outlook and better methods, otherwise the best-laid plans will come to nothing and

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will be subject to severe derision. Foremen are possibly the most conservative group in British industry, and before intelligent adaptability can be expected, they will demand some evidence of change in attitude from those who should show the way by example. Change of outlook, as is inevitable, will not be accomplished overnight, but if rightly tackled, may be acquired in a surprisingly short space of time. The degree to which training can be undertaken and made effective depends on the manner of reception and the measure of response, so that adequate preparation is as important as that the methods adopted be suitable.

Training methods must be selected according to requirements. As conditions demand, selection of appropriate methods can be made from any, or from a combination of some or all, of the following: day-to-day contacts; spasmodic or regular conferences; general or limited group discussions; internal or external instruction; separate apprenticeships or individual assignments; and a choice of many auxiliary facilities provided locally or nationally.

94. Introduce Conferences

A foremen's conference programme must start with a definite decision as to the groups to be catered for, and their specific requirements. Although it is sometimes desirable, as a first step, to begin with spasmodic meetings on general subjects, conferences should be planned beforehand in relation to one another, as well as in themselves. The subjects to be dealt with should apply specifically to the most urgent every-day problems met by the foreman in practice. The nature of these problems will make it possible finally to decide on the most suitable conference leader—who may be the works manager, the personnel director, the training specialist, or a senior foreman. The need for conducting the conference competently with a set plan and with specific skill will have substantial bearing on the final selection. A conference leader, in general, should not hold a position greatly in advance of those attending the meetings, for fear of stifling discussion, nor should he be a person held in little respect, in which case the outcome of expressed opinion would be of little practical use.

The long experience with conferences in America, confirmed by opinion in this country, has raised the procedure to the level of established standard practice. This may be summarised briefly:

- (a) Meetings should preferably be regular, and either weekly, formightly, or monthly, with the alternative of spasmodic meetings as and when required;
- (b) Meetings should be restricted to foremen of similar rank and limited in size to fifteen members;
- (c) Duration of meetings should be limited to one or one-and-a-half hours;
- (d) Conferences are generally held in the company's time, but sometimes after the working period;
- (e) Conferences are usually led by a high executive, such as the works manager.

This is the bare framework of the conference method. As with other devices of management, it is not sufficient merely to introduce and imitate plans successful elsewhere. Like Works Councils and Production Committees, the mechanism in itself means very little. Results depend on fulfilling certain conditions, and these may be indicated thus:

- (a) Conferences should have the full and genuine support of the higher management;
- (b) Foremen's meetings should be regarded by all concerned as useful and profit-making, and not time-wasting;
- (c) Effective and competent leadership is essential;
- (d) Meetings should be informal in nature with ample opportunity for discussion;
- (e) Decisions should arise out of the group and should not be imposed upon it;
- (f) Conferences must be planned and well-prepared beforehand;
- (g) Matters discussed should relate to practical problems, and useful recommendations adopted without undue delay.

The introduction of foremen's conferences should not be regarded as a form of management by committees. The primary purpose is to discuss policies, programmes, and problems; to advise on changes; to agree on general decisions; to appreciate the need for common action; to act as a unity and permit of uniform application; and to ensure understanding and collaboration between departments.

If conferences are to be successful, certain essentials of procedure should be borne in mind, and these may be stated:

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- (a) The conference is fundamentally a method of training;
- (b) Training is a continuous process;
- (c) The management must not only be able to teach, but the foreman must be willing to learn;
- (d) The purpose of the conference is to develop foremen as individuals, to stimulate their thoughts along the right lines, to encourage them to suggest improvements—in fact, to make them think for themselves;
- (e) The foreman must be regarded as the central figure in workshop efficiency, and a tangible and improving asset to his company;
- (f) Conferences can improve only suitable foremen, so that sound selection is a necessary preliminary;
- (g) The subjects dealt with should be essentially practical;
- (h) The aim of the conferences should be understood to be the improvement of industrial relations and the raising of operating efficiency, so that the work done can be planned and co-ordinated;
- (i) Informal discussion should predominate the proceedings, which ought to be conducted in a manner of persuasion and suggestion;
- (j) The conclusions should be incorporated in minutes, and distributed, so that a record exists and decisions may be carried into effect.

The topics dealt with at conferences will naturally depend on circumstances. It is advisable, if stagnation is to be avoided, that new methods and new programmes be used from time to time. Some of the plans employed may be indicated, to show the variety and flexibility of the means available:

- (a) Conferences led by the works manager on current and pressing inter-departmental problems;
- (b) Outlines of departmental policies and procedures, led by the executive in charge, dealing with such functions as planning, progressing, purchasing, personnel, time-study, and costing, from the viewpoint of the foreman's requirements;
- (c) Discussions on contracts, deliveries, and costs, new methods and procedures, new plant and products;
- (d) A series of talks on the background of the company, its

- financial and commercial policies, selling practices, and organisation.
- (e) Adopting some text-book, specially prepared material, notes or reports with a view to discussion and adaptation.

95. Consider Auxiliary Services

Of the auxiliary services available, perhaps the most important are those facilities provided by local educational institutions. Provided sufficient support is assured, most technical colleges will willingly inaugurate classes for training in general foremanship or in technical subjects. If one business is unable to provide sufficient trainees to justify a regular course, arrangements can often be made with other companies either in the same or in some other trade, situated in the locality, so as to guarantee a minimum class attendance. Where this is done, many institutions are prepared to arrange their courses to meet the specific needs of the companies chiefly concerned. Where the kind of training required must be intimately connected with trade peculiarities, it is possible to arrange courses of instruction at suitable centres where attendance can be assured by companies engaged in similar technical processes—as was the case with the laundry industry. For more general requirements, Ministry of Labour and National Service Courses in Foremanship can be of much value where they exist, or may be started by arrangement without difficulty. More advanced courses to supplement existing technical courses in engineering, chemistry, and so on, can often be made available along the lines of the classes in Economics of Engineering required in examinations for membership by the leading professional and technical institutions.

A wide range of other auxiliary training facilities are available for use from time to time. These include the provision of a foremen's association, inter-works and inter-departmental visits, local and national conferences, and the distribution of suitable literature.

96. Instal Measures for Control

If methods are not already available to enable the foreman to control his department, consideration should be given to the provision of such records as will permit him to appreciate unit costs, individual output, quality standards, delivery accomplishments, employee earnings, and so forth. From the point of view both of stimulating the foreman's interest and of facilitating control by the

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management, such figures as are vital and interesting should be supplied. If the foreman's status is to be raised and his usefulness improved, he should at least be provided with the essential facts to indicate current performance, and a carefully calculated budget from which to measure achievement and to act both as an incentive and a target. Some classes of work lend themselves more readily to measurement in units, but where such figures have been provided and used by management and foremen to improve production, the results generally have been regarded as worth while. The supply of essential departmental figures implies their immediate interpretation, and urgent action to bring about rapid improvement. Records following promptly on performance, apart from indicating possible breakdowns and bottlenecks some time before they might be discovered by observation in the usual way, encourage a better balance in supervision where all factors are appreciated at their true significance.

The existence of figures for departmental control permits the value of training to be measured from time to time. Although such comparisons and calculations are rarely simple, and usually involve a number of factors, general evidence of progress and some indication of its degree can be ascertained. If improvement is either indecisive or imperceptible, it should be decided whether advancement can legitimately be expected from the foreman, whether unsatisfactory results are general and reflect on training as a whole, or whether lack of progress applies only to some departments, and if so, whether this reflects on the foreman concerned or his response to the kind of training offered.

Among the more indirect indices of departmental improvement are the extent and character of labour turnover, absenteeism, complaints and grievances.

All these records, whether concerning control of work or workers, when made available jointly to management and to foremen, enable measurement to replace guesswork, results to be mutually appreciated, and difficulties to be better understood.

97. Examine Remuneration

One of the common causes of unsatisfactory departmental results lies in the foreman's discontent with his remuneration. Considering the growing exactness of supervision, he often regards the compensation for his responsibility as insufficient in comparison with the remuneration of the operatives he controls.

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Although the foreman is usually expected to earn a salary about 50 per cent greater than the average skilled operative under him, it sometimes happens, especially in the unusual conditions met in war-time production, that skilled, and very frequently unskilled, operatives earn as much or even more than the foreman. Another source of unsatisfactory comparison occurs when the foreman, earning a fixed salary with no provision for overtime, finds in certain seasons or during particular periods that, although working excessive hours, he receives no compensation and little recognition, while the operatives under his control are amply rewarded. A further source of discontent occurs when the foreman, by careful planning, by modifying machinery, and by making improvements, is able to increase the earning capacity of the operative without himself receiving any benefit or compensation.

These, and other sources of dissatisfaction, become relatively serious or otherwise, depending on the margin of earnings existing between the average, and sometimes the best, operative and the foreman. Foremen have even been known to restrict the earnings, and in consequence the output, of employees so as to maintain a reasonable margin between the wages of operatives and the income of the supervisor.

It is reasonable to suppose that if first-class men are to be attracted to the job of departmental supervision, and if existing foremen are to be induced to make more valuable contributions, suitable compensation must be assured. The foreman, not unlike the operative, naturally expects adequate reward for extra effort and improved results. Whether such essential adjustments are to be made by periodic salary increases, occasional bonus distributions, or definite incentive rewards, will depend on circumstances; but the need for a fairly frequent review of remuneration is clear, not only because of its effect on departmental results, but also as a material factor in supervisory training.

Also, it is advisable to examine and revise from time to time those conditions closely associated with improved status and which deal with holidays with pay, provisions for sickness, accidents, and retirement.

98. Conclusions

In advancing this proposed programme to facilitate the launching of foremanship development in the business unit, the chief considerations underlying the plan may be summarised briefly. They are:

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- (a) To improve the executive ability and technical effectiveness of foremen as regards both production and labour;
- (b) To encourage each foreman to improve himself and to make him more conscious of his responsibilities and duties;
- (c) To provide for better collaboration between management and foremen, and to create better relationships between one department and another;
- (d) To make supervision more decisive in manufacturing and more influential over man-power by broadening outlook, and by counteracting the effects of over-specialisation;
- (e) To facilitate the introduction of new methods of control and leadership more in accordance with the requirements of the times;
- (f) To permit proper unified understanding of company policy and practice, and to allow of its common application;
- (g) To produce the type of men required for supervisory and managerial positions, by promotional placement without resort to outside sources;
- (h) To save time by properly planned and intensive training, as distinct from haphazard, fragmentary, and casual instruction;
- (i) To allow the best possible use to be made of supervisory experience by encouraging suggestions and by facilitating collaboration;
- (j) To create the highest degree of executive teamwork while permitting maximum individual incentive, and as a preliminary to co-operation within departments;
- (k) To safeguard the future of the business unit against excessive reaction by ensuring competent supervision.

Some objections to conferences will no doubt be raised from many quarters. Those who agree in principle may, during the war, plead lack of time available, and after the war may continue to plead unjustifiable expense. These well-worn objections have always been raised on the introduction of new functional devices. Centralised training, modern piece-rates, planning, and progress, have all at times been condemned for these reasons. The question is, whether the advantages gained outweigh the expense. This depends on the suitability of the application and the competence of its execution. The cost of developing foremen cannot be disputed.

A final decision depends on whether conferences can be made worthwhile. It can be said, however, that thousands of companies in America, and some very highly reputable firms in Britain, incorporate the foremen's conference as an essential part of organisation and training.

The acid test of any new proposal in business is whether results justify the expense, or, in other words, whether the probable returns compare favourably with the investment.

Of the many factors in management that cannot be reduced to a cash basis, the cost of foremanship is the most intangible. It is almost impossible to estimate the cost of the everyday mistakes and shortcomings of supervisors. Neither is it practicable to compute the inconvenience and delay due to carefully planned schemes misfiring because of the inability of the "man on the job" to carry these fully into effect. Good management is rendered largely ineffective by an unsatisfactory supervisory force.

Attempts are often made to calculate the percentage expense of supervision, and comparisons are made between similar departments in the same or separate factories. Many difficulties stand in the way of a clear-cut comparison because identical conditions rarely pertain.

The cost of supervision cannot be determined satisfactorily, either by reference to the different salaries paid or in relation to the unit cost of production. It is not the amount paid but the result obtained which matters. The real test is whether better all-round results in a department can be obtained by an improved standard of supervision, and, if so, whether this can be more cheaply achieved in practice by replacement or by training, or both.

There are two aspects of supervisory cost: the degree of supervision required by each operative; and the amount of management time needed by each supervisor. If, by a higher grade of foremanship, the supervisory cost of each operative is reduced and the managerial expense lowered, the time and money spent will prove an amply remunerative investment.

One final word. The factors to consider and weigh up are, whether the improvements that may be expected from foremanship training can be more cheaply obtained by other means; whether the results likely to be achieved are justified by the estimated time and expense involved; and lastly, whether the company can afford, irrespective of the expense, to face the future with its existing standards of supervision.

APPENDIX A

GOVERNMENT SUPPORT IN THE UNITED STATES OF AMERICA

As long ago as 1917, under the provisions of the Smith-Hughes Act, the Federal Board of Vocational Education gave official Government guidance in the problem of industrial training. Since then, considerable groundwork has been done. However, in June 1940, Owen D. Young and Sidney Hillman suggested a Training Within Industry service in the National Defence Advisory Commission. A month or two later this service was set up under the direction of C. R. Dooley and Walter Dietz. After being first transferred to the Office of Production Management, it was later incorporated in the War Manpower Commission.

In the two years of the defence period and almost one year of war, Training Within Industry, according to its 1942 report, has given advisory assistance, mapped out training programmes, provided training, or otherwise served 5,753 plants employing 5,604,990 men and women. The national organisation functions through 22 district offices and serves 224 industrial areas with 647 training consultants serving without compensation, a paid staff of 79 training specialists, and a clerical force of 100.

The underlying purpose of the T.W.I. is:

"To assist war production industries to meet their man-power needs by training within industry each worker to make the fullest use of his best skill up to the maximum of his individual ability, thereby enabling production to keep pace with war demands."

In carrying out this policy, plants were recommended to give balanced and appropriate attention to the following phases of training:

- 1. Upgrading of all classes of personnel as their experience and abilities warrant, through planned job progression, job rotation, and intensive supplementary instruction both on and off the job. Each plant should take stock of the talent and experience of its own personnel before employing new men and women.
- 2. Development of Production Specialists through intensive instruction on the job in basic operations.
- 3. Development of all-round SKILLED MECHANICS through trade apprenticeship, in accordance with Federal standards, separate from production worker training, for the purpose of developing a predetermined, limited number of all-round journeyman mechanics.

4. Development of SUPERVISORS through careful selection, assignment of supervisory duties of increasing responsibility, and provision for related organised help through discussions and conferences, under both plant and outside auspices, dealing with methods of instruction, methods of developing better ways of doing a job, methods of improving working relationships, and knowledge of responsibilities.

Apart from the issue of bulletins on Upgrading, Training the Production Worker, Preparing Instructors to Give Intensive Job Instruction, Better Supervision, etc., special problems were tackled and reports issued for general guidance on such matters as Precision Lens Grinding, How Idle Machinery is Used for Training, Upgrading in a Large Steel Corporation.

An example of the bulletins is given by the inclusion of the first of a series under the general title of Better Supervision:

BETTER SUPERVISION

STRENGTHENING THE MANAGERIAL ORGANISATION

Helping managerial personnel to meet its operating responsibilities is the key to the success of an organisation. It is also the key to the training of new workers and to the upgrading of present workers. Always it is the key to the maintenance of high morale throughout the work force, which represents the very foundation of the industrial defence programme.

The recommended practices outlined herein, represent successful programmes in many companies throughout the country.

C. R. Dooley, Director

Training within Industry.

Underlying Policy

Planned development is the key point in considering the building of a strong executive and supervisory force. In such planning many companies stress one or two features and feel that these will build a strong managerial group. Some maintain a favourable salary scale; others have a liberal retirement plan; some stress periodic rating; others pursue excellent training programmes; still others emphasise the close personal relationship between upper and lower levels of supervision.

Individually these features are sound, of course, but no one or two of them are sufficient. The full range of factors affecting supervisors and executives must be given attention and action if a company is to be assured of a strong, energetic, and co-operative managerial force.

Typical of the many examples showing the necessity of attention to all aspects of this problem are the following:

GOVERNMENT SUPPORT IN U.S.A.

Foremen are not likely to do their best work in meeting schedules and reducing costs if they are held responsible for delays and costs over which they have no control.

A foreman finds it difficult to be genuinely helpful to a worker who has a wage question if he has a question regarding his own compensation.

Any executive or supervisor is not likely to keep close touch with his group if he is able to see his own superior but once or twice a month.

Many an executive or supervisor stays with his company because the salary is satisfactory, but uses but a portion of his real capacity because his area of responsibility is not clear, his relationship with his boss not cordial, or he is a victim of internal politics.

Examples such as the foregoing, illustrate why sound and far-sighted management policy is so important, and why such policy, even when it has been formulated, does not serve its intended purpose unless all members of the managerial group understand it and know their specific responsibility in carrying it out.

SOUND PRACTICES

The following fundamentals—already well known—represent some of the principal practices which build a strong managerial force.

Selection

1. Select executives and supervisors on a basis of leadership qualities, and not alone on job knowledge and job skills.

An important aid at the time of selection is the preparation of a written position description, setting forth clearly the duties and results expected of the incumbent.

Training

- 2. Prepare a chart of the whole organisation. Discuss it with all executives and supervisors. See that each man understands the functions and relationships of the various units and particularly his own place and function in the organisation.
- 3. See that all members of the executive and supervisory group understand the company's policies, particularly, industrial relations policies.
 - A growing number of companies are reducing to writing their basic policies, both to clarify just what the policies are, and to assure that everyone in the company understands them.
- 4. See that each executive and supervisor is given sufficient authority to carry out the responsibility assigned to him.

- 5. Give such organised aid and training to the executive and supervisory force as is appropriate and will be helpful on current problems.
 - This is an important point representing a programme in itself. Bulletin 4-B is devoted specifically to how such aid and training may be given. It is important to note that a well-rounded plan for Strengthening the Managerial Organisation requires attention to the twelve points mentioned herein, plus the amplification of this section in Bulletin 4-B.
- 6. Plan transfers and rotations as well as promotions. Some companies make transfers and rotations for the express purpose of developing and rounding-out individual executives and supervisors and not solely to fill positions after a need has arisen. They find that competent men in widely differing fields can "trade jobs", not only without impairment to operations, but with distinct profit to the men and to the jobs. Fresh and unprejudiced points of view toward the new jobs usually result in outstanding improvements. It is not uncommon for executives with 25 years' service to have had ten to fifteen different positions. The resultant competence, breadth of knowledge and judgment is a major factor in the success of companies pursuing this plan.
- 7. Encourage professional development. Membership in engineering, management, accounting, sales and other professional societies, and appropriate participation therein is encouraged by many companies. Foremanship too, is a field of growing professional interest.

Status and Pay

- 8. Give supervisors all the privileges of salaried employees, plus whatever additional privileges are appropriate in each local situation, i.e., parking space, desk equipment, lockers and other symbols of status.
- 9. See that supervisors, particularly foremen, are "in the know", i.e., trust them, give them actual departmental profit and loss figures, not just man-hour reports. Have them review (solicit their suggestions when appropriate) and see that they understand any plan that involves them such as:

Job Classification.

Wage payment plans.

Contemplated purchase of new equipment.

Rating plan concerning themselves or their workers.

Plans for upgrading workers and supervisors.

Change in cost reports. New inspection plan. New layout of department.

Union agreement, grievance procedure, grievance settlement.

New production or quality standards.

GOVERNMENT SUPPORT IN U.S.A.

And above all, see that foremen are informed as to any new general company policy or provision Before such information is released to workers. Examples: new plant rules; sick pay plan; provisions relating to military training and service; new union contract, agreement or procedure; new defence contract received; wage and hour law rulings.

- 10. Pay supervisors not only the going salary rate, but a rate appropriately above those supervised.
- 11. Pay all supervisors on a salary basis, i.e., all who give their full time to directing the work of others. (Lead men, working foremen or those whose supervisory function deals only with assigning work and helping maintain production schedules, may be exceptions.)
 - During periods of temporarily slack operation, do not reduce supervisors to an hourly rate unless such a period is prolonged and it becomes necessary to demote them to hourly rated jobs. Until this action is taken as a last resort, have them work part-time and pay them proportionately, but maintain them on the salary roll.
- 12. Give appropriate salary increases based upon performance. Avoid being influenced by the many personal relationships that obtain in every organisation.

In many companies it is the accepted policy that the development of a foreman, superintendent or works manager is just as important as the development of a product, plant or policy. Just as much attention is given to planning the one as to the other. In planning the development of managerial personnel, a great many factors are considered. They embrace all the day-to-day practices and influences in the company which make for sound growth, development and prudent management.

Washington, D.C.
November 1940

Published by kind permission of the War Manpower Commission, Washington, D.C.

NOTE.—Before this second edition was published, the Ministry of Labour and National Service commenced, in November 1944, a full Training Within Industry service for the instruction of supervisors in companies during working hours.

APPENDIX B

THE FOREMEN'S ASSOCIATION

The constitution of a typical Foremen's Association given relates to the Deputy Foremen's Association of Cadbury Brothers Ltd. Commencing in 1913 with 74 members and an annual subscription of five shillings, the Association has had for the past twenty years a subscription of three shillings per month. Entirely self-supporting and self-administering, the Association has been built on an elaborate Benefit Scheme. A separate, but somewhat similar association, exists for Departmental Managers and Senior Foremen.

CONSTITUTION

Name.—The Association shall be called "THE BOURNVILLE WORKS FOREMEN 'B' ASSOCIATION".

Objects.—To co-operate together for the furtherance of efficient Foremanship. To mutually protect and advance the interest of its members. To render financial assistance in time of need.

Membership.—Open to all Foremen "B" employed at Bournville Works.

Officers.—The Association shall be governed by an Executive Committee which shall consist of the Chairman, Hon. Treasurer, Hon. Secretary and seven other members.

The Executive Committee shall be elected by ballot of all the members. From and by the members so elected there shall be appointed a Chairman, Vice-Chairman, Secretary and Treasurer. The first meeting of the newly-appointed Executive shall be called within seven days after the Annual Meeting, by the retiring Secretary.

Auditors.—Two auditors shall be elected at the Annual Meeting but shall not be eligible for a seat on the Committee.

Annual Meeting.—The Officers and Committee shall retire annually at the Annual Meeting which shall be held in February each year, when the new Executive shall be announced.

Method of Election.—Members eligible for service on the Executive shall be nominated by at least two other members. The consent of the nominee must be obtained before nomination. Nomination papers duly completed shall be in the hands of the Secretary on or before 31st December. Ballot to take place during January. Retiring members shall be eligible for re-election.

Finance.—Each member shall contribute 3s. per month towards the

THE FOREMEN'S ASSOCIATION

funds of the Association. The financial year shall end on 31st December each year.

Trustees.—Three Trustees, viz.: Chairman, Treasurer, and Secretary shall be appointed, any two of which shall be authorised to draw any moneys.

Investment of Funds.—The funds shall be in the hands of the Executive who shall have power to invest subject to consent of Annual Meeting.

Meetings of Executive Committee and Quorum.—The Executive shall meet twelve times a year; six members shall constitute a quorum.

Sub-Committees.—Sub-Committees shall be elected from the members of the Executive with power to co-opt.

Allocation of Funds.—Funds shall be allocated to the following purposes:

- 1. Administration. General expenses of Association.
- 2. Works Collections. Donations not to exceed 1s. per member except by special resolution of the Executive.
- 3. B.W.D.P.F. Payment of subscriptions (9s. per annum) to the Bournville Works Dependents Provident Fund.
- 4. Presentations. Presentations to retiring members shall be to the value of £5 5s. On other occasions at the discretion of the Executive Committee.
- 5. Mutual Aid. Consideration under this scheme shall be given to all members of the Association. Consideration shall also be given to the member on behalf of his wife and any children up to the age of 17 years under the following headings:
 - (a) Specialists' Fees (Consultation). 50 per cent of such fees shall be granted towards the cost of the first visit to a Specialist.

 Additional visits to be considered and grants made at the discretion of the Executive.
 - (b) Prolonged Illness of Member. In cases where, owing to prolonged illness, a member's salary falls below normal, a grant of £3 per month for a period not exceeding three months shall be made, when the case shall be reconsidered.
 - (c) Nursing Home Fees. Grants to the extent of 3s. per day will be made towards Nursing Home Maintenance charges for any surgical operation and treatment.
 - (d) Doctors' Bills. 33⅓ per cent of all doctors' bills shall be paid up to a maximum of £20 in any one year. Bills for less than £3 for any one illness not to be considered.
 - (e) Expenses due to Illness at Home. 20 per cent Nurses' Fees up to a maximum of £5 in one year; 33\frac{1}{3} per cent Domestic Help expenses up to a maximum of £5 in one year. All applications must be submitted within twelve months.

- (f) Funeral Benefit. In case of death whilst a member of the Association, a grant of £5 5s. shall be paid to dependants at the discretion of the Executive.
- (g) Cessation of Membership. The above benefits shall apply for six months after retirement or cessation of membership. In the case of reductions the benefits shall apply for twelve months. This to apply where twelve monthly payments have been made.

Alteration of Rules.—Rules shall only be altered or amended at an Annual or Special General Meeting, and after seven days' notice of such proposal, alteration or amendments have been circulated by the Secretary of the Association to the members. If any alterations or amendments of Rules are proposed by any member, twenty-eight days' notice of such propositions, with full text of such, must be given in writing to the Secretary.

It is understood that any matter not dealt with in this Constitution (particularly pensioned members) shall be left to the discretion of the Executive.

Remedial Benefit.—Members on recommendation covered by Medical Note for remedial convalescence can be given a grant of £3 3s. Only one such grant in any twelve months.

Published by kind permission of Cadbury Brothers Ltd. and the Bournville Works Foremen "B" Association.

APPENDIX C

SUPERVISORS' DISCUSSION GROUPS

Following the completion of a Ministry of Labour and National Service Course in Foremanship at the South-West Essex Technical College, it was found that the Foremen attending felt the need for further instruction on, and discussion of, their common problems. Accordingly, in April 1942, there was set up a Supervisors' Discussion Group. The movement spread quickly and a number of groups were started at technical colleges in the London area and followed shortly afterwards in provincial centres.

The Supervisors' Discussion Group is open to all foremen and forewomen, irrespective of grade, company or industry. It is a self-governing, self-supporting body, consisting of from 50 to 100 members paying modest subscriptions to cover out-of-pocket expenses. A Managing Committee is formed to arrange speakers for meetings which occur at monthly intervals. The usual practice at each meeting is to devote three-quarters of an hour to one hour for a lecture, usually by a specialist on some aspect of foremanship, and this is followed by discussion for an hour.

In March 1944 and in February 1945, Annual One-Day Conferences were held in London, addressed by men prominent in industry on subjects of interest to foremen.

The Supervisors' Discussion Groups meet the needs of foremen who desire to extend their general knowledge of foremanship and who are not otherwise able to benefit from a Foremen's Association.

A typical constitution is given:

CONSTITUTION

(i) Membership

1. Membership shall be open to persons of either sex who reside in or are employed in the area, and who are engaged in a supervisory capacity at industrial or other establishments or colleges, or are being trained to become supervisors, or who are interested in promoting the technical advancement of supervisors.

2. For the purpose of this rule, "supervisor" shall be construed to mean any person who shall direct or watch with authority the work or proceedings or progress of others.

(ii) Objects

- 1. The education of the members in the principles of Industrial Administration and their application as they are found to affect supervisors.
- 2. The objects shall be attained by the presentation and reading of papers by members, and such non-members as may be invited to do so: by talks, lectures, visits and any other method the Committee shall deem suitable.

(iii) Subscriptions

1. An annual subscription of or such other amount as the members in General Meeting may from time to time decide, shall be paid direct to the Hon. Treasurer of the Group. In addition, per annum shall be paid for college membership by those not already members of the college.

(iv) Funds

- In recognition of the payment by members of the Group for college membership, the college shall provide suitable accommodation for meetings of the Group, and permit members to enjoy all such privileges, benefits, or facilities as they now accord, or may in future accord, to ordinary members of the college.
- 2. All money received on account of donations and otherwise than as subscriptions shall be used to further the objects of the Group.
- 3. The Group is a non-profit-making association and no part of the funds or any temporary surplus thereof shall be distributed to members by way of profit.

(v) Termination

1. Any member, provided that he or she is under no liability to the Group, shall be entitled to resign on giving notice in writing of his or her intention so to do.

(vi) Meetings-Rights of Voting

- 1. An Annual General Meeting, of which seven days' notice shall be given, shall be summoned in such a manner as may be directed by the Committee and shall be held at such time and place as the Committee may determine, and all members shall be entitled to be present thereat.
- 2. The Annual General Meeting shall be held during to receive the report of the Committee for the past year and to elect the Committee for the ensuing year.
- 3. Special Meetings may be summoned on receipt by the Hon.

SUPERVISORS' DISCUSSION GROUPS

Secretary of a requisition from four Committee Members or a signed application to that effect from not less than twenty Group Members.

- 4. Each member shall be entitled to one vote, and if the votes are equal the Chairman of the meeting shall have a second and a casting vote.
- 5. Members who have not notified to the Secretary an address to which notices to them may be sent, shall not be entitled to a notice, and all meetings, business and voting shall be held and conducted without notice to such members.

(vii) Committee

- 1. The Committee shall be elected at the Annual General Meeting. It shall consist of ten members, including honorary officials, but excluding any co-opted persons, providing that the number of members to be elected under this rule may be altered by resolution of the members in General Meeting, after due notice has been given.
- 2. One-half of the members elected to form a Committee shall retire in rotation year by year, after the Committee as a whole has been in office for one year. The order of retirement shall be settled in the first instance by ballot and thereafter by seniority.
- 3. At the expiration of this term of office, the Chairman shall become Vice-Chairman for the ensuing year, unless re-elected as Chairman. At the end of this period he shall retire in rotation as other Committee members.
- 4. The Committee shall have power to co-opt members to fill any temporary vacancy thereon occurring between annual elections. The Committee also have power to co-opt such other persons, whether members of the Group or not, to give advice or to provide special knowledge, etc., provided the number so co-opted does not exceed half the number of elected members of the Committee.
- 5. The Committee have power to nominate candidates for each annual election. The general membership shall also have the power to nominate candidates for election to the Committee. These nominations shall be made to fill vacancies occurring at the Annual General Meeting and must be supported by at least two members, i.e. a proposer and a seconder.
- 6. A Chairman, Vice-Chairman, Honorary Secretary and Honorary Treasurer shall be elected annually from the Committee members. The Chairman of any meeting shall have the casting vote.
- 7. It shall be necessary for five members of the Committee to be present at any meeting of the Committee to form a quorum.

(viii) Special Representation

- 1. During such time as the college provide accommodation for meetings of the Group, there shall be at least one representative of the college on the Committee.
- 2. The representative or representatives of the college shall have all the powers, privileges and obligations of any other member of the Committee, shall have the power to vote, and shall be included as one of the ten members of the Committee.
- 3. Neither the representative of the college nor the Liaison Officer of any other body shall be called upon to pay an annual subscription; they shall be empowered to take part in any discussions etc., at the meetings of the Group, but shall not have the power to vote at these meetings.

(ix) Powers and Duties of Officers

- 1. The Honorary Secretary shall give his attendance at all meetings of the Group and its Committee. He shall record correctly the minutes of the proceedings, which he shall transcribe into a book, to be authenticated by the signature of the Chairman after the latter has obtained the approval of the meeting at which they are presented. He shall keep all papers and documents of the Group in such manner and for such purpose as the Committee may direct. He shall send all notices of meetings of the Committee to members of that Committee, and shall supply all necessary details for inclusion on notices convening meetings of the Group.
- 2. The Honorary Treasurer shall, when required by a General Meeting or by the Committee upon demand made, or notice given to him in writing, render a just and true account of all money received and paid by him on account of the Group. He shall also, on the like demand or notice, pay over all money and deliver all property for the time being in his hands or custody to such person or bank as a General Meeting or the Committee appoint. He shall be responsible for such sums of money as may from time to time be paid into his hands by the Honorary Secretary, or by any person on account of the Group; he shall balance his account monthly and supply the Honorary Secretary with a copy thereof for presentation at a meeting of the Committee. The Honorary Treasurer shall give his attendance at all meetings of the Group and its Committee.
- 3. The Honorary Secretary and Honorary Treasurer shall, on all occasions, in the execution of their offices, act under the super-intendence, control and directions of the Committee.
- 4. Any expenses incurred by the Honorary Secretary in the discharge

SUPERVISORS' DISCUSSION GROUPS

of his duties for the Committee, or by any member of the Group acting under instructions from the Committee, shall, upon submission of a true statement to the Honorary Treasurer, be repaid from the Group funds.

(x) Keeping and Auditing of Accounts

- I. The Committee shall cause the accounts of the Group to be regularly entered in proper books.
- 2. The Committee shall once at least every year, submit the accounts, together with all necessary vouchers up to December 31 then last, for audit to two members appointed as auditors by the members in General Meeting. Such auditors shall have access to all the books and accounts of the Group, and shall verify them with vouchers, documents, etc., relating thereto, and shall either sign the annual balance sheet and statement of accounts as found by them to be correct, or shall specially report to the members in general meeting in what respects they find any errors or deficiencies, or any accounts unvouched for.

(xi) New Rules and Alteration of Rules

1. No new rule shall be made, nor any rule amended, altered or rescinded, unless with the consent of a majority of the members present at a General Meeting specially called for that purpose.

(xii) Dissolution

I. The Group may be wound up by a majority decision of a General Meeting of the Group called for that purpose. If at the time of such winding up the available funds of the Group are insufficient to meet its liabilities, the deficit shall be covered by a levy of equal amount on all members of the Group. If at such time the available funds of the Group are more than sufficient to meet its liabilities, the surplus shall be equally divided between and paid to the members of the Group (after allowing for the cost of such distribution) or shall be devoted and paid to such object, purpose or institution as the majority of the members present at such Meeting may decide.

APPENDIX D

A FOREMEN'S CHARTER

Being the conditions of employment for Foremen at the Enfield Rolling Mills Limited.

The Company is concerned to foster and achieve the highest standards of Foremanship.

To this end the Company here defines the terms of employment and certain special facilities offered to its Foremen. These are additional to the terms and facilities available to all employees of the Company, as set out in the Company's Works Handbook.

This memorandum does not conflict with or override the provisions of the Essential Work (General Provisions) Order, 1941, or of any other legislation affecting these Works.

1. Status

All Foremen are appointed to the staff; such appointments fall into three grades, on a basis of ability and responsibility:

- 1. Senior Foremen, with responsibility for the work of any one of the larger Departments.
- 2. Foremen, comprising all other Foremen except Acting Foremen.
- 3. Acting Foremen, comprising men on probation, the period of probation to be at the discretion of the Management.

Foremen are not required to clock on and off on the ordinary time recorders; they are, however, required to conform to the time-keeping system as is in force for staff.

Unless otherwise specified, the terms "Foreman" or "Foremen" in the remainder of this memorandum are understood to embrace all three grades of Foremen enumerated above.

2. Engagement

Each Foreman holds a letter of engagement, which sets out his duties and the terms of engagement as between the Company and himself; each such letter of engagement deals with specific terms of employment, as they affect the individual, and does not alter or otherwise invalidate the general principles of foremanship at Enfield Rolling Mills Ltd. here

A FOREMEN'S CHARTER

set out. Each Foreman must acknowledge, in writing, receipt of and agreement with the terms set out in his letter of engagement, on the form provided.

Each alteration in salary, or change in status, must be the subject of an exchange of letters between the Company and the Foreman concerned.

3. Salary and Bonus

The Company is not able to agree fixed rates of remuneration applicable equally to each grade in all departments; it is manifestly not practical to put forward a scale equable to all, regardless of the nature of their responsibilities, when departments vary so widely in size and function.

It is the policy of the Company to reduce production bonus payments wherever possible, progressively, and to pay a basic salary commensurate with the responsibility of the Foreman concerned. The Company adopts the view that, whilst a high standard of foremanship is essential to its prosperity, any scheme of bonus or cash incentive, based on quantity and paid to Foremen, must in the long run be detrimental to quality and efficiency.

No new scheme of production bonus for any or all Foremen is to be introduced by the Company without previous discussion with the Foremen's Association. This clause does not in any way affect the ex gratia payment of bonus at Christmas, or at other times, to any Foreman, for meritorious work or for other reason; such payments are made only at the discretion of the Company and neither any single payment nor any series of payments are to be regarded as a condition precedent for future payments.

4. Payment

Foremen's salaries are paid weekly in arrear. Bonus (where applicable) is paid weekly or monthly in arrear, according to departmental practice.

5. Notice

Termination of engagement requires the appropriate number of weeks' notice (as below) on either side, or similar number of weeks' salary in lieu of notice on the Company's side.

- (a) Senior Foremen 6 weeks. (b) Foremen 4 weeks.
- (c) Acting Foremen 2 weeks.

6. Sick Pay

Foremen are paid on the following basis during absence on account of sickness:

- (a) Senior Foremen
- Ten weeks at full pay, in addition to the balance of pay due for the salary week in which the sickness began. At the end of the fourth full week, six weeks' notice of the Company's intention to discontinue payment (in writing and signed by the Secretary) must be given.

(b) Foremen.

- Seven weeks at full pay, in addition to the balance of pay due for the salary week in which the sickness began. At the end of the third full week four weeks' notice of the Company's intention to discontinue payment (in writing and signed by the Secretary) must be given.
- (c) Acting Foremen
- Seven weeks at full pay, in addition to the balance of pay due for the salary week in which the sickness began. At the end of the fifth full week two weeks' notice of the Company's intention to discontinue payment (in writing and signed by the Secretary) must be given.

In each case the Company requires Medical Certificates from the Foreman's own doctor. At the close of the periods named the Company is at liberty to make other arrangements in individual cases as may be decided.

In the case of accident at work, the Company continues to pay salary during absence for a period of not less than 13 full weeks; the position is, however, then reviewed by the Company, such review to be repeated (where applicable) at the end of every quarter thereafter.

In each case when, as outlined above, the Company undertakes to pay a Foreman's full salary during absence, any National Health or Workman's Compensation payments due to the Foreman are to be paid over to the Company.

A FOREMEN'S CHARTER

7. Holidays

Bank Holidays and National Holidays are paid for in full.

In addition, each Foreman is allowed two weeks' holiday on full pay in each year of his employment by the Company.

During the first year of his employment a Foreman is entitled to a holiday on full pay, proportional to the length of his service to date and at the discretion of the Manager concerned.

8. Superannuation

Foremen, as members of the staff, are expected to join the Company's Contributory Staff Superannuation Scheme, the rules of which are set out elsewhere.

Superannuation contributions are related to the basic salary only.

9. Promotion

It is the policy of the Company, wherever possible, to promote existing employees rather than to introduce men from outside.

The Management retains the right to promote anyone whom they consider fit, from any source, but Senior Foremen are to be consulted before a Foreman or an Acting Foreman is appointed. Demotion, where necessary, is to be handled in a similar manner.

10. Responsibility

In his work a Foreman is always directly responsible to the Manager of the Department in which he works.

In case of dispute a Foreman may, through the Manager concerned, request an interview with the responsible Director of the Company.

11. Discipline

Discipline, cleanliness and orderliness within the factory are the direct responsibility of the Foremen.

12. Night Shift

Foremen of any grade may be required to undertake night duty at regular intervals; it is the Company's desire to establish a standard of night foremanship and night discipline at least as high as that prevailing by day; in the achievement of this the co-operation of all Foremen is especially asked.

13. Works Council

Under the present constitution of the Company's Works Council, whereby the number of seats filled by invitation of the Managing

Director is twelve, the Managing Director each year is to offer four such seats on the Council to Foremen; it is the practice of the Managing Director to ensure that not less than two of such representatives are changed from year to year, and that at least one is a Senior Foreman.

14. Foremen's Association

General matters affecting all Foremen are discussed by the Management with the "Enfield Rolling Mills Foremen's Association", which has been constituted on the initiative of the Company's Foremen but with the knowledge and approval of the Company.

The Company provides facilities for meetings of the Foremen's Association, provided that matters discussed are concerned only with the problems of foremanship in the Company's Works at Brimsdown. The Company plays no part in the administration or organisation of the Foremen's Association, although it is the Company's wish that all Foremen be members thereof, that the Association be properly constituted, and that its affairs be conducted in a proper and constitutional manner.

A copy of all minutes of meetings of the Foremen's Association, or of any Sub-Committee thereof, is to be submitted within 7 days of each meeting to the Company.

The Foremen's Association is the accepted and proper channel for discussion on general matters between the Management and all Foremen, or their representatives. Such meetings are arranged, where necessary, by the Chairman or Secretary of the Foremen's Association and the Company's Labour Manager; not less than 7 days' notice of such meetings and of the suggested agenda therefor is to be given.

Meetings between the Management and the Foremen's Association may not discuss matters which are the responsibility of a Manager in his own department.

15. Education and Training

It is the Company's policy to encourage all Foremen to take advantage of all possible facilities for training and education, in order that the standard both of Foremanship and technical knowledge throughout the Company may thereby be raised.

In special cases a Foreman may be allowed time off from work for this purpose, at the discretion of the Manager concerned; in the main, however, instruction must be taken outside working hours.

Information as to facilities for training and education are available at the Labour Office; such facilities may be at the Works, at the Enfield Technical College, or elsewhere, and the subjects covered include:

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Accountancy
Cost and Works Accountancy
Draughtsmanship
Electrical Engineering
Foremanship
Industrial Administration
Mechanical Engineering
Metallurgy
Production Engineering

or any other subject, by arrangement.

The Company is ready to bear the cost, in bona fide cases, of all college or other fees for instruction received, and to provide on loan all recommended textbooks.

Success in examinations is rewarded, the nature of the award being at the discretion of the Board.

16. Visits

It is the Company's policy to arrange from time to time visits for Foremen in small parties, to other factories inside the Enfield group of companies, and to progressive undertakings elsewhere. Such arrangements are made, jointly, by the Labour Manager and the Chairman for the time being of the Foremen's Association.

17. Revisions

This memorandum, and the terms and conditions of employment here defined, may be altered or revised by the Company at any time. Before this is done, however, the Company will discuss such alterations and revisions with the Foremen at a properly constituted full meeting of the Foremen's Association.

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